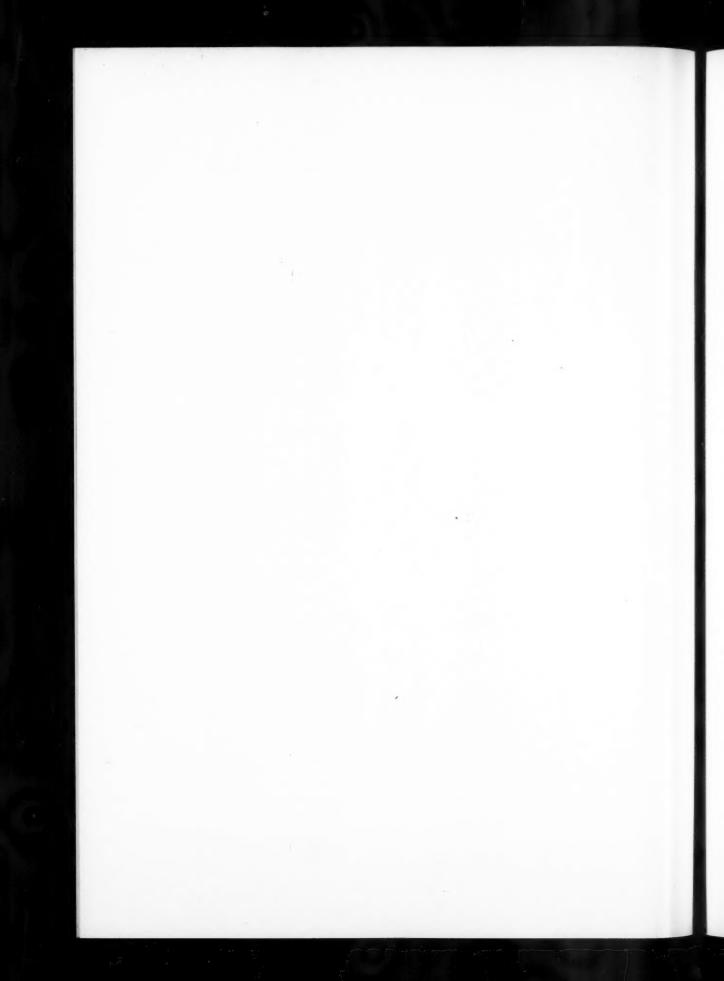
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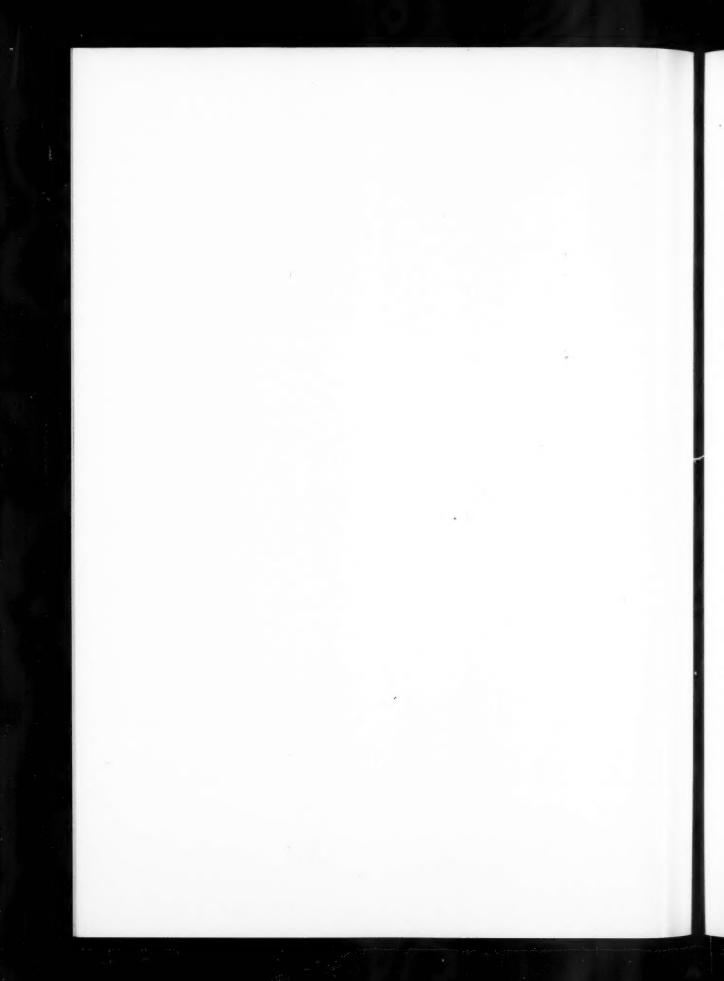
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ARCHAEOLOGICAL NOTES

EXCAVATIONS AT PYLOS, 1939

The Dorian Invasion, whatever its source and however it ran its course, has left a broad gash, like a fire-scar in a mountain forest, cutting through the archaeological panorama of ancient Greek history. Many towns and settlements that flourished in the preceding Heroic Age were henceforth abandoned or declined to a state of insignificance. Even some of the great and noted strongholds sank into virtual oblivion, and the places where they had stood were lost from the view of men. In late antiquity the site of Troy itself, in spite of all literary fame, was no longer remembered, and academic circles disputed as to its identification. Exactly the same fate overtook Pylos, Sandy Pylos, the seat of the Neleid King Nestor, where Telemachos was so hospitably entertained on his famous journey described in the Odyssey. In Strabo's time surviving visible remains of the town were unknown, and scholars disagreed as to where they should be sought; most of them held that Classical Pylos, lying below its citadel Koryphasion, still stood on or near the historic spot, while others, basing their views on their own interpretation of Homer, insisted that Nestor's capital must have lain far to the north, in distant Triphylia. But the problem was never put to the practical test of the spade and the matter remained a scholastic question.

In modern times, while no exhaustive study of the evidence had been undertaken, the identity of the Homeric with the classical Pylos was generally taken for granted until in 1907 Professor Dörpfeld discovered near the village of Kakovatos in Triphylia, not far to the southwestward of Olympia, a group of three great tholos tombs, together with an adjacent hill bearing evidence of occupation in prehistoric times. Professor Dörpfeld lost no time in publishing a circumstantial account of his discoveries, along with a well-reasoned argument for the identification of the site as that of Nestor's Pylos. An immense broad sandy beach offered a striking justification for the Homeric epithet; and a persuasive attempt to bring the testimony of Strabo and other ancient writers into topographical harmony with the new location was made by the fortunate discoverer. Although some dissenting voices have been heard, Professor Dörpfeld's identification has not been seriously challenged until the present day.

In the meantime, however, archaeological exploration in southwestern Greece has been slowly marching on. In 1919, continuing an undertaking begun by the late Professor Skias, Dr. K. Kourouniotis excavated a fine beehive tomb near the village of Tragana, not far from the northerly shore of the Osmanaga Lagoon, and only some 2 km. distant from the beetling cliff of Koryphasion. Although it had suffered from later depredations, the vault yielded much interesting material, including three magnificent jars decorated in the "Palace Style," almost exactly like those of the splendid series recovered by Dr. Dörpfeld at Kakovatos and patiently mended and restored under the supervision of Professor Kurt Müller. Some years later, in 1925, Dr. Kourouniotis found and cleared a second tholos in the same general neighborhood; it lies in a vineyard below the village formerly called Osmanaga, now renamed

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Koryphasion, to the northeastward of the lagoon. Like the other, this tomb also had been plundered, but its structural peculiarities and a notable group of vases recovered from the chamber assign it a distinguished place among the beehive tombs known in Greece.

Widening his explorations through the region to the north of the Osmanaga Lagoon, Dr. Kourouniotis with his foreman Charalambos Christophilopoulos observed the superficial signs of several further Mycenaean tholos tombs, three or four of which were definitely indicated by lintel blocks still in place, and some others with considerable probability by evidence of other kinds. These sepulchres had been constructed at irregular intervals on favorable knolls in a zone running several km. northward, more or less along the line of the modern highroad that winds its way up through hilly country toward the large town heretofore known as Lygoudista, but lately rechristened Chora.

The presence of so many royal tombs of the Mycenaean period—for in these tholoi we must surely recognize the burial-places of kings—in southwestern Messenia, in the district of Classical Pylos, was a significant fact which could not fail to attract the attention of archaeologists; for no other early site in Greece save Mycenae alone can show a comparable number. It was, in fact, perfectly clear that a Mycenaean capital of more than local importance had once stood somewhere along the northerly border of the Bay of Pylos, but its exact site was not obvious without investigation. Koryphasion, the lofty citadel of the classical city, was a distinct possibility, although so far as published reports could be consulted, Mycenaean pottery had hitherto been discovered only in the huge cave in its northern flank; or the stronghold might have occupied one of the many hills rising gradually inland toward distant Mt. Aigalion.

Recognizing fully the importance and the high promise of further exploration in an effort to solve the problem, Dr. Kourouniotis was eager to continue the work he had begun. Desiring a collaborator, he extended to Mr. Blegen, among others, a cordial invitation to join him in the task, an honor which it is needless to say was accepted with very great pleasure. The object of the joint enterprise is the systematic archaeological investigation of the whole region of Pylos. We had hoped to begin it in 1929, but owing to circumstances beyond our control, it proved impossible to set operations going at that time. Since then a decade has passed, and with the completion in 1938 of the excavations at Troy, conducted by the expedition representing the University of Cincinnati, we judged that a favorable moment had at last come to turn to Pylos. The venture, which has been made possible through the financial support of Professor and Mrs. Semple, begins under the joint auspices of the Greek Archaeological Service and of the University of Cincinnati. Dr. Kourouniotis, the senior partner, now Director of the National Museum at Athens, entrusted to Mr. Blegen as junior partner the practical task of conducting the work in the field, but both collaborators share equally in the responsibility for what was done.

The initial campaign, extending from March 25 to May 11, 1939, was devoted mainly to preliminary explorations. During the first fortnight we spent most of our

¹ The regular members of the staff in the field were Dr. B. H. Hill, W. A. McDonald, and C. W. Blegen, with Mrs. Blegen and Mrs. Hill assisting for a shorter period. The number of workmen em-

time wandering about the country on foot, under the guidance of Charalambos Christophilopoulos, who after his initiation under Dr. Kourouniotis in 1925, has occupied much of his leisure searching for further tombs. In the course of these peregrinations, which took us through much of the hilly district to the north of the Bay of Pylos, we examined all surface signs that might indicate the presence of sepulchres below, and we looked particularly for the telltale potsherds that invariably betray the sites of ancient habitation. The net result of these explorations was the discovery of at least six such sites, several of which had not previously been noted. High above the sea at a place called Vigla, just beside the highroad, less than 2 km. from modern Pylos, is a small knoll strewn with fragments of Mycenaean pottery. A long ridge in a locality named Beyler Bey, beyond the stream to the southeast of Koryphasion village, is also marked by considerable numbers of preclassical sherds. A third Mycenaean site, already known to Dr. Kourouniotis, may be recognized in a low mound called Portes, cut by the highway just before it reaches Koryphasion. But the largest and most impressive of all the sites examined lies much farther to the north, at a place called Ano Englianos, where a long, flattopped elevation (fig. 1) stands in a lofty position above and to the westward of the modern carriage road, some 4 km. beyond Koryphasion and about the same distance short of Chora. Both collaborators visited this hill together in March 1938; Dr. Kourouniotis had seen it previously and Mr. Blegen had collected potsherds on it in 1929. The pottery seemed for the most part to represent a late type of undecorated Mycenaean ware; great quantities lay scattered about on the slopes on all sides below the summit. At one point near the easterly edge of the plateau a formless mass of mortar-like construction protruded from the ground. It looked almost like concrete and might have been thought at first glance to be either Roman or mediaeval in date; but it also resembled the calcined and fused ruins of the walls of the palace at Mycenae, destroyed by fire.

The position itself is one that dominates the whole region. To the southward the hills subside gradually toward the narrow plain bordering the lagoon of Osmanaga, some 5 km. distant, which, though now shut off from the sea by a sandbar, probably in ancient times formed the northern end of the Bay of Pylos. A magnificent panorama in this direction sweeps across the bay, bounded by Sphacteria on the west, to the mountains of the mainland on the opposite shore. Toward the west, beyond a broad and very deep stream bed, rises a high parallel ridge that flanks the sea and terminates farther southward in a series of separate elevations, the last and highest of which is the cliff of ancient Koryphasion. To the east, across a series of similar ridges, each separated from its neighbors by deeply eroded river beds, in which streams run down to Osmanaga Lagoon, the view extends far away to distant Mt. Lykódimo. And finally toward the north, beyond a group of rough gullies and rising hills may be seen the bare, jagged range of Mt. Aigalion, stretching away to the

ployed was kept very small, not exceeding 22, and as acting foreman we had Charalambos Christophilopoulos of Osmanaga, whose previous service in 1925 with Dr. Kourouniotis has already been mentioned. For much assistance and many courtesies shown us we are under obligations to Miss Lucy Talcott and other members of the staff of the Athenian Agora Excavations and to the Director and other officers of the American School of Classical Studies. We are also grateful for valued advice and help to Dr. Sp. Marinatos, Director of the Greek Archaeological Service.



Fig. 1.—HILL AT ANO ENGLIANOS, FROM THE SOUTHEAST



Fig. 2.—Exterior Wall of the Palace, from the ${\displaystyle \operatorname*{East}}$



Fig. 3. — Paved Floors of the Palace, with Anta in Background. Trench II from the Northeast

northwestward toward Kyparissia. Altogether there could be no finer situation for a Mycenaean stronghold, and we therefore determined to dig our first trial trenches on the hill at Ano Englianos.

The plateau, approximately 165 m. long from east to west, with a maximum width of ca. 85 m., has abrupt declivities on the southerly, westerly and northerly sides, and a rather steep slope to the eastward, where a terrace ascending from the north must have provided access in ancient times. The whole hill is now occupied by a venerable olive grove, the trees of which, according to the testimony of the owner, are unfailingly and remarkably productive. Seven trenches were laid out on the plateau, 2 m. wide and ranging from ca. 20 to 70 m. long, avoiding the olive trees, but affording a preliminary test of the deposit covering the different parts of the hill. The duty of supervising the actual digging was entrusted to Mr. McDonald, who kept a detailed record of all that was done. It was soon ascertained that the western half of the plateau was occupied by the ruins of an extensive Mycenaean edifice, which had been destroyed in a great conflagration, while the rest of the hill had apparently stood open, free from buildings except for some relatively insignificant structures at the extreme northeasterly end.

Although the details of the plan have not yet been determined, there can be no reasonable doubt that the edifice was a palace, comparable in size and character to those at Mycenae and Tiryns. Substantially built with massive exterior walls, faced in ashlar blocks (fig. 2), it seems to be divided into a complex arrangement of rooms and corridors, all provided with well-paved, cement-like, waterproof floors (fig. 3). The interior walls, constructed largely of rubble, were uniformly coated with stucco, which in some rooms, at least, appears to have borne painted fresco decoration. The palace is oriented from southwest to northeast, and some of the principal apartments evidently faced the noble prospect of Koryphasion, Sphacteria and the Bay of Pylos toward the south. A rounded stone column-base, at any rate, suggests that a portico opened in this direction, but it must be admitted that the limits of the building have not yet been definitely determined. Behind the supposed portico two immense squared stone blocks, more than 8 m. apart, might well be the bases of antae flanking the entrance to a stately megaron-like hall (fig. 4).

The greater part of the palace lies buried to an average depth of rather more than 1 m. Most of this deposit is evidently not the result of gradual accumulation, but was certainly laid down altogether at one time, namely on the occasion when the structure was destoyed by fire. It must have been a conflagration of great intensity, for the interior walls have in many places been fused into shapeless masses, stones converted into lime, and, resting on the blackened carbonized rubbish and ashes covering the floors, is a thick layer of fine dry red-burnt earth, presumably the disintegrated débris of crude bricks that once formed the material of the superstructure. Great wooden beams must have been used in the building of roofs and ceilings, and probably the upper walls were laid in a framework of wooden supports in the well-known Mycenaean manner. In spite of the heavy damage caused by the fire, the internal arrangement of the palace will no doubt still be recognizable in considerable detail when the site is completely excavated; for even the most seriously injured walls can yet be traced by the lines of the plaster still adhering to them, and the thick burnt



Fig. 4. — Anta-Block in Northwest Quarter of the Palace (Trench V)



Fig. 5.—Room of the Archives with Clay Bench, from the Northeast



Fig. 6. - Tablets on Floor of Room of Archives (Tablets Nos. 409-441)

deposit has certainly conserved part of what lies below it. Fortune has been kind in one respect, at least; for it is clear that after the conflagration the site was never again occupied by human habitations, and that source of further damage has thus been averted.

It is most likely that the occupants of the palace were obliged to abandon it in haste when the disaster came, and there is good hope of recovering something of interest and value when the floors are cleared. In a room of the northwestern quarter, only a corner of which has been exposed, a huge mass of pottery came to light. The vessels, several of which were extracted unbroken, seem to be for the most part rather shapely, three-legged cooking-pots in undecorated ware. A similar deposit in the southern quarter of the building comprises mainly unpainted long-stemmed cylixes.

Just outside what we take to be the northwestern exterior wall of the palace, and parallel to it, our trench exposed the foundations of a colonnade-like building, bordering the edge of the plateau. It seems to have had a longitudinal row of interior columns, which were supported on rectangular bases of porphyry. Two of these bases were uncovered in the trench.

At the southeasterly limit of the palace area, where a small pit had been dug many years ago, it is said, by persons unknown, presumably in search of a tomb, some further excavation brought to light part of a well-built underground drain which, passing beneath floors and walls, evidently carried off drainage from the main apartments of the palace to the eastern slope outside it. The drain is constructed of fairly regular squared blocks of limestone, and it was covered by flat stone slabs. In and about it we found quantities of shattered pottery, including many painted fragments, clearly much earlier, to judge from their style, than the sherds and vases discovered on the palace floors themselves. Continued investigation here should yield useful evidence regarding the date of the construction of the palace about which we are still uncertain. The floor deposits, of course, can only represent the final phase of occupation; for in a building so pretentious as this, with its smooth well-kept pavements, it cannot be supposed that rubbish was allowed to accumulate and long encumber the floors while the household was in residence.

The bulk of the pottery found on the floors, so far as it has yet been cleaned and studied, appears to belong to one of the ultimate stages of the Mycenaean period (end of Late Helladic III), and it is thus clear that the destructive fire cannot have laid the place in ruins until the close of the thirteenth century, if it was not indeed appreciably later still. It is not impossible that we should recognize here yet one more instance of the havoc wrought by the Dorian Invasion; but further excavation and study are required before we can safely venture a final opinion on this point.

A small room of particular interest came to light in the southeastern quarter, not far from the outer bounds of the building in this direction. It is a narrow chamber, some 3 m. wide and perhaps twice as long, although the northeasterly end has not yet been uncovered A door, indicated by part of its stone threshold still in place, seems to have provided access, possibly in the middle of the long side, from the southeast. A rough clay bench, ca. 0.60 m. wide and rising some 0.40 m. above the paved floor, runs around the three sides of the southwestern part of the chamber

(fig. 5), to the left of the door as one enters. Resting on this bench, scattered and in irregular groups, were found approximately 200 inscribed clay tablets, while some 400 more were recovered on the floor itself in the space between the benches, in the area farther to the northeastward, and in the doorway (fig. 6). The numbers given are those of our provisional inventory, made on the spot, which attained a total of 618. Among them at least 20 are intact, many more are complete, though broken,

Fig. 7.—Tablets on Floor of Room of Archives (Tablets Nos. 286–327)/

and the rest are fragments and groups of fragments. Exactly how many entire tablets there will be altogether when all these pieces have been cleaned and mended it is yet impossible to say, but there will certainly be several hundred in the aggregate.

When found the tablets were permeated with damp, very soft, and ready to disintegrate if touched incautiously; and we thought it certain that they had never been properly fired. Their removal and conservation were thus delicate operations, calling for much care and patience. Mr. McDonald and Mr. Blegen undertook the task themselves, and we feel we may say without seeming unduly to boast that their efforts met with gratifying success, and that little, if anything, was lost that might otherwise have been saved. One cannot pay too warm a tribute to Mr. McDonald's circumspection, perseverance and long-suffering in spending so many days on his hands and knees in positions of extreme discomfort.

The tablets lay in no regular order, singly, in groups or in heaps (fig. 7), some face up, some facing down, some on their edges. As the room was gradually cleared in small areas, one after another, each section was cleaned and photographed, the tablets being numbered and their positions recorded before they were taken out. Each numbered item was wrapped in porous paper and conveyed to our quarters in Pylos, where most of the packages were opened and their contents laid out in order on drying-frames of wire mesh, invented by Dr. Hill to allow aeration from above



Fig. 8. - Tablet No. 131

and below. After treatment of this kind for several weeks it was seen, to our great satisfaction, that even the soggiest tablets and fragments had dried out and become hard enough for relatively safe handling. A more searching examination now possible led us to the conclusion that they had, after all, been fired originally, in some instances perhaps only lightly; and many had apparently been more or less thoroughly baked a second time when the palace was destroyed by fire. To this latter firing is probably to be attributed the dark bluish-black color of so many of the tablets. The best preserved pieces are now virtually as hard and durable as the contemporary coarse pottery.

Classified according to shape, the tablets, all of which seem to have been made of fine, well-screened clay, are of two main kinds, which we may for convenience call "broad and flat" and "long and narrow." To the broad flat type (fig. 8) belong tablets of oblong rectangular form, ranging in size from 7 by 12 or 13 cm. to 15 by 24 cm., or even larger, while the thickness varies from ca. 1 to 2.5 or 3 cm. The obverse is smoothly finished, the back usually only roughly rounded, and the corners are not carefully squared. The smooth face, in preparation for the writing, was ruled with a series of fine, rather deep incised guide-lines, usually running crosswise, but sometimes longitudinally. The spaces between the lines, destined to receive the writing, range from 6 or 7 to more than 20 in number, depending on their size and that of the tablets, and in one exceptional instance there are no fewer than 31. The tablets of the second type (fig. 9), constituting perhaps two thirds of the total number, vary from slightly more than 1 cm. to 3.5 cm. in width, and from 8 or 9 cm. to ca. 25 cm. in length. The face is finished smoothly, the back generally in careless fashion. The writing usually runs lengthwise, and there are commonly one or two incised guide-lines, making two or three spaces for the script, though in not a few instances we note only a single band of writing without guide-lines. A few tablets of both types are opisthographic, bearing writing on the back as well as on the front, though ordinarily that on the reverse seems to be merely of a supplementary or subsidiary character; and in some examples a few signs appear on the edges, perhaps intended to facilitate identification in case many tablets were shelved close together or stacked one above another. The roughness of the back would have made such stacking awkward and difficult.

All the tablets when found were coated with a heavy lime accretion, rather hard and very adhesive, which in most cases permitted little or no trace of the writing to appear. In order to avoid any possible injury to the writing, no acid and no metal implements were used for cleaning, the work being done entirely by hand with fiber brushes and wooden toothpicks. This slow and laborious task has not yet been completed, but it is being patiently and skilfully carried out by Andreas Mavroyannis of Old Corinth, whose services were kindly lent us by Dr. Broneer. His methods are proving to be highly effective, and the tablets that come from his hands can readily be transcribed and photographed (fig. 10).

Since much of our material is still undergoing treatment and has not yet become available for study, it is impossible at this time to offer a comprehensive analysis and discussion of the writing itself. But it can be stated at once that the documents are written in a form of the Minoan script classified by Sir Arthur Evans as Linear

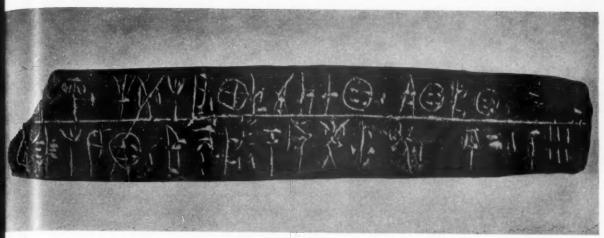


Fig. 9. - Tablet No. 317

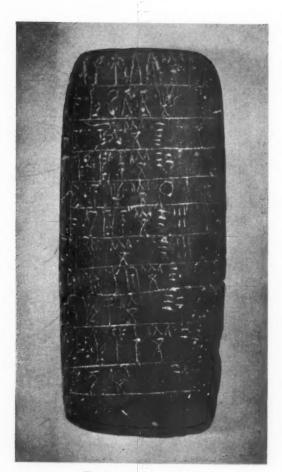


Fig. 11.-Tablet No. 20



FIG. 10. - TABLET No. 213

B. Most of the signs on our tablets are seen to be identical with signs that occur on tablets of that class from Knossos, while the tablets themselves are strikingly similar to their Knossian counterparts, not only in composition and shape, but in character as well. For almost all are obviously lists, catalogues or inventories (fig. 11), in which items, apparently referring to persons, domestic animals, cereals and other things, are carefully entered with numbers or quantities. These interpretations, needless to say, are those so brilliantly and acutely deduced by Sir Arthur Evans in his study of the Knossian material, and the decimal system of numerical notation is identical with that of Minoan Crete, which Evans has so shrewdly solved.

In some other respects, too, our deposit of tablets bears a remarkable resemblance to one found in the Palace of Minos at Knossos, for in the southern corner of the room, lying among tablets on the floor, were recovered remains of some half dozen badly corroded, small, bronze hinges, perhaps the fittings of a wooden box or chest in which documents were kept. Furthermore, we were able to salvage a series of clay sealings, which likewise have their counterparts in the Knossian hoard. Some are in bad condition, but in several instances the impressions are fairly well recognizable. One bears a heraldic pair of winged griffins, with a third and smaller griffin above; two, possibly made with the same gem, show a man with uplifted arms, standing before a running horse (or bull); another apparently has a lion. On the most interesting of all, which is pierced longitudinally for stringing, a dog runs alongside a galloping horse. A large character of the script has been incised across the design, and on the rather rough back of the sealing is a word-group of four signs. It is interesting to note that both the single character and the group recur on our tablet No. 222.

In looking over some of our documents which have been cleaned sufficiently for transcription, we have observed certain signs and combinations of signs which do not, at a first scrutiny, appear among the published inscriptions of Linear B from Crete; furthermore we have noted very few sign-groups or word-groups that seem to be identical with those on corresponding tablets in the Knossian series, so far as the latter are accessible in publications. Indeed the only absolute identities yet noticed are the two groups of two signs each, used in summations on tablets apparently recording lists of human beings, and referring, in accordance with Sir Arthur Evans' interpretation, to children of the two sexes (Palace of Minos iv, 708). Two or three other word-groups are partly like Minoan examples, but differ in one or more final characters. Pending further intensive study and collation of the texts it would, of course, be highly imprudent to draw categorical conclusions, but we need not hesitate to say, with all due reserve, that the script used in our palace is almost certainly a modified or adapted form of the Knossian Linear B. Whether our documents were written in the Minoan language or in a quite different tongue cannot yet be stated with safety, though the former alternative seems to be almost certain. In this connection the problem of dating the deposit at Ano Englianos is of no little importance. The small chamber in which the tablets were found may safely be recognized as an archives-room of the palace; and it is clear that they were there, exposed on the bench, or shelf, and perhaps lying on the floor, at the time the palace was destroyed by fire. As previously stated, we think this destruction cannot have occurred before 1200 B.C., in round figures, and that it may indeed have come about considerably later. It is hardly conceivable that so large a collection of rather fragile documents could have been kept together for centuries in an open apartment of a building actively occupied. As supporting evidence we should mention the fact that the pottery found in association with the tablets, including some sherds of the Granary Class, is in no way different in character from that recovered elsewhere on the palace floors. It is worth noting also that two tablets were brought to light in other quarters of the palace, one near the extreme southwestern edge of the plateau, and one at the opposite end of the building, some 70 m. distant. We are thus inevitably led to the conclusion that the tablets must be dated at the earliest to the close of the thirteenth century B.C., that is, to a period when, it is almost universally agreed among archaeologists and historians, an early strain of Hellenic stock had already long been established in control of the Greek mainland.

According to Sir Arthur Evans, Linear B flourished at Knossos during the LM II Period down to the destruction of the Palace, approximately at the beginning of the fourteenth century. A borrowed form of the script, in use on the mainland some two hundred years later, might well be expected to show some changes and variations, even were the language the same, though in the latter case many word-

groups should surely be identical.

Whatever its full bearing when the evidence has been more thoroughly studied, the recovery of so great a collection of written records in a Mycenaean contextthe first deposit of its kind to come to light on the mainland of Greece – will necessitate some revision of certain current theories regarding the state of culture in the late Mycenaean world. Thus Professor Nilsson's picture of the Achaeans as a body of illiterate adventurers who imposed their domination in a series of viking raids is surely somewhat out of focus. The orderly methods of administration, so illuminatingly revealed by the tablets from our palace archives, do not fit well with such an interpretation, and it seems clear henceforth that the Minoan heritage surviving at the close of the thirteenth century was still a far more potent factor than has hitherto been recognized. The failure to find similar written documents at the great mainland centers, such as Tiryns and Mycenae, is not easy to explain, but we feel sure that it must be due to mischance and not to the lack of knowledge of writing at those sites. On the contrary, what little evidence we have, and it is not so little, such as the inscriptions on pottery from Tiryns, Mycenae, Thebes, Eleusis, and elsewhere, makes it certain that writing was known; and we can only conclude that it must be through the fickle vagaries of fortune that the respective archives have been lost or have hitherto escaped detection.

While the exploration of the palace site was proceeding it seemed advisable to examine one of the several beehive tombs that had led us to look for the capital in this direction. Two such tholoi are known at Ano Englianos, one lying less than 100 m. to the north of the palace, the other almost the same distance to the south of it. A third beehive tomb was recognizable about 1 km. farther southward at Kato Englianos, where a surviving lintel block in its original position (fig. 12) formed a conspicuous landmark. It was this latter tomb we decided to excavate. Mrs. Blegen supervised operations here, with the assistance of Mrs. Hill, employing a force of

some ten laborers.



Fig. 12.—Lintel Block of Tomb 3, before Excavation



Fig. 13.-Dromos of Tomb 3



Fig. 14.—Left Door-Jamb of Tomb 3, from Dromos



Fig. 15.—Doorway of Tomb 3 from Chamber

Directly above the chamber stood a small stone house, which was used by the owner, Nikolaos Gliatas, for the storage of his tools and of the dried currants produced each year by the adjacent vineyards. Before we could begin our digging it was of course necessary to demolish this building and to re-erect it in a new place beyond the limits of the tomb. When this had been done, work was commenced simultaneously in the dromos and above the collapsed chamber.

The dromos, running almost exactly from southwest to northeast, ca. 8.10 m. long and 2.30 m. wide, had been hewn in clay-like hardpan (which in this part of Messenia is called "aspropouliá") and was not provided with lateral retaining walls of stone (fig. 13). The sides of the passage are nearly vertical, with no appreciable intentional inclination. The right half of the dromos was excavated first, in order that the deposit of earth filling it might be seen in cross-section. The fill, in fact, revealed plainly four successive floor-levels or ground-levels, each marked by a thin layer of black carbonized matter; it was thus clear that after the first burial and filling, the dromos had been reopened and refilled three times, presumably for later interments. Furthermore, it was interesting to note that on each occasion less earth was removed than had been dug out on the preceding occasion; the last time, indeed, digging was restricted to the inner end of the dromos, providing little more than a steep descent close to the doorway. This evidence of frequent re-opening of the tomb was interpreted by us (rightly, as it proved) to augur ill for the chance of finding an undisturbed royal burial in the chamber. No trace of a constructed barrier was observed at the outer end of the dromos, but at the inner end, or rather in the doorway itself, were found remains of two successive stone walls that had closed the entrance.

The doorway, 1.65 m. wide and ca. 3 m. deep from front to back, had been fairly substantially constructed (fig. 14) of large and small, irregular, flat stones, but considerable parts of the outer and inner corners had buckled and collapsed. Originally the opening had probably been spanned by three large lintel blocks, only the middle one of which now remains in place, ca. 3.10 m. above the floor. The outer block has disappeared, but huge fragments of the inner one lay where they had fallen, obstructing the inner portion of the entrance. The sides of the doorway (fig. 15) inclined inward, but the walls have now bulged so much that the original width of the opening at the top can no longer be accurately measured.

The tholos, 7.66 m. in diameter, measured on the floor, was built for the most part of hard, unworked, flattish stones, not quarried, but evidently brought from river beds in the neighborhood. The stones lay only roughly in courses (fig. 16), though there was a more noticeable attempt at regularity at the corners of the doorway. So far as could be determined, the wall seems to be about 1 m. thick at the bottom, laid around the circular cutting hewn out for the chamber in hardpan. The wall rises vertically almost 1 m. before the curve of the vault begins. The central portion of the chamber had collapsed, and the wall stands now to a maximum height of 3.25 m. The upper part of it, in rather bad condition, required considerable repair and strengthening in cement mortar, and in order to safeguard our workmen, heavy props were set up at intervals to prevent accidents during the progress of work.

The immense quantity of fallen stone that had to be removed made the excavation of the chamber from above a slow and difficult task. The collapse of the dome had certainly played havoc with the remains of burials in the tomb, but even this can hardly be regarded as sufficient to account for the utter confusion and disturbance revealed when the floor deposit was reached. Small bits and fragments of human bones lay scattered about everywhere in complete disarray in the final meter of fill,

and not a single skeleton in natural articulated state was found anywhere in the tomb. In the inner left quarter the head and fore quarters of a bull, or an ox, were uncovered in some semblance of order; and to the right of the center the jaws, chine and ribs of a sheep, or goat, lay approximately in proper sequence. The pottery had suffered equal damage, and, although a great quantity of scattered sherds was recovered, not one intact vase came to light, or even a cluster of fragments of a crushed and broken vessel. We have never seen so thoroughgoing a devastation in a Mycenaean tomb, and we are unable to provide a satisfactory explanation. One thing only can be said with certainty; namely, that the damage was done in ancient times, indeed before the Mycenaean period had come to its end. If the last in the series of burials had been found unmolested, or merely dislocated by the fall of stones from the vault, one might presume that for some reason the preceding in-



Fig. 16. - Left Side of Tholos, Tomb 3

terments had on that occasion been treated with unusually scant courtesy, but no convincing evidence for such an interpretation could be discerned.

In spite of its disordered condition, the tomb nevertheless yielded a considerable amount of material and not a little information regarding its onetime contents. Everything discovered, including even small splinters of bone, was meticulously saved, and many small objects came to light when the earth was sifted. The widely scattered remnants of human skulls noted, indicate that perhaps a dozen persons had been buried in the chamber. Only two skulls, lying protected beneath the fallen

lintel in the doorway, had escaped relatively uncrushed; as some fragmentary legbones were observed on the opposite side of the doorway, it is not unlikely that these remains do actually represent the final burials in the tomb, which must in that case have been effected in the stomion itself. Nothing of the accompanying funeral gear could be identified.

It is not yet possible to say anything definite about the pottery, for the material is still awaiting the attention of our mender. When the numerous sherds have been cleaned and spread out for study we believe some vases can be reconstituted, though the circumstances of their discovery, as remarked, were far from propitious. In the meantime it may be mentioned that many fragments recovered in the dromos and a few from the chamber seem to be decorated in the "Palace Style," a fact which has its bearing on the question of the date of construction and first use of the tholos.

Among the small objects found during the digging of the dromos and chamber and in sifting the earth we may first refer to numerous small pieces of gold. Many are mere scraps or larger bits of plain goldleaf; the beads include some 15 rosettes, 7 discs, 2 beads of amygdaloid shape, 1 shield-shaped, a large, handsome bead or pendant in the form of a one-handled jug with granulated decoration, 8 spherical, 1 four-petalled, a large floral piece with bluish inlay, and a round granulated bead. More than 50 tiny bits of fine, bent gold wire may have been used as inlays in the decoration of a bronze dagger. Silver is represented by a half dozen indeterminate pieces. Several fragments of a slender, strongly ribbed rapier of bronze were collected from various quarters of the chamber. Among the stone beads are 7 of differing shapes in carnelian, several in green malachite, and 1 in amethyst; and there is a fine, three-sided sealstone in chalcedony, bearing intaglio designs on two of its faces. Some badly decayed remnants of amber were also noted, but the largest category is that of objects in farence and glass paste, including some 500 items. Many are beads of various sizes and forms, and many were probably made to be used as inlays. The rather extensive repertory both of shapes and of decorative motives, although most of them were previously known, seems to us to differentiate this collection markedly as compared with any similar group from a contemporary tomb in Argolis. Among the floral patterns rosettes, foliate sprays (or feathers), palmate leaves, and lilies occur commonly, while marine life is represented by the nautilus, the murex, and cockle shells; other subjects include spirals, a figure-8 shield, a labyrinth pattern, and a twin-turret motive. Some badly damaged fragments of carved ivory were likewise recovered in the tomb. The best piece, perhaps the columnar corner of a small chest, or pyxis, bears on each of its two exterior faces three superposed panels, separated by delicate beading, and containing effective representations of the nautilus. Another fragment, possibly from the handle of a sceptre, preserves only part of its decoration: it seems to be a sphinx with a lion's body and with a human head turned back in a curiously contorted attitude. A third piece is a much injured strip, decorated in extremely fine and delicate workmanship, with the well-known "triglyph and metope" motive.

When the floor of the chamber was cleared some scattered traces of burning appeared in a few places. They might be explained as signs of fumigation or of small burnt sacrifices; certainly there was no evidence of cremation. Around the edge of

the chamber, close to the wall and resting on the floor, but not in orderly arrangement, were found some 12 blocks of poros of considerable size, neatly squared and properly worked. Most of them are slightly wedge-shaped. They may have been used in the construction of the dome, perhaps to form a ring, as in the "Tomb of Clytemnestra" at Mycenae; and after the collapse of the central part of the vault they might well have fallen from such a position upon the heap of débris below, so as to roll downward toward the sides. A ring of the kind suggested, if at the level of the lintel, would of course require a vastly greater number of blocks than 12. Some others had certainly been broken to bits, but even so, if we assume a ring, it must have been considerably higher than the lintel, indeed, not far from the top of the structure.

The inner right quarter of the chamber could not be entirely excavated, for it was partly occupied by a modern cistern, full of water, which had been built not many years ago by the owner of the land. The destruction of the cistern was judged by us to be unnecessary, since its bottom reached the floor of the tomb, and nothing of the burial-deposit had been left there; furthermore, its removal would have seriously weakened the adjoining sections of the tholos and perhaps caused them to fall.

Two cists had been cut in hardpan below the floor of the tomb. One, in a central position, was relatively small and shallow, ca. 1.25 m. long, 0.55 m. wide, and 0.45 m. deep. The other, which lay well over toward the right side and was somewhat irregular in shape, was much larger in size, with a length of ca. 2.50 m., a width of 1.30 m., and a depth of about 1.25 m. Both cists had been thoroughly disturbed to the very bottom, and their original contents can now only form the subject of conjecture. The loose earth filling them, like the rest of the floor-deposit in the tomb, contained numerous disconnected fragments of bone, scattered bits of gold, beads of faïence and paste and other débris. In the large cist were also found two of the squared blocks of poros that have just been discussed. If they had fallen from above, the cist must have been at least partially open at the time. The floor of the large cist showed clear evidence of intense fire, from the effects of which the clay had turned bright red in color; some carbonized matter also remained, and perhaps we should recognize here a sacrificial pit and not a grave.

Notwithstanding the almost complete despoliation of the tomb before our time, our excavation has achieved more than a merely negative result. A study of the animal bones recovered may shed some fresh light on Mycenaean burial customs; the pottery, when properly worked over, may add its bit to our knowledge of provincial Mycenaean ceramics; and the flotsam and jetsam of jewellery and ornaments spared us constitute a collection of some value for an estimate of Mycenaean art and culture in a district remote from Mycenae itself. The tantalizing remainder of its vanished wealth shows that the tholos at Kato Englianos was certainly erected to serve as the tomb of a king; and there can be no doubt that the royal occupant had, during his lifetime, his earthly residence in the newly discovered palace at Ano Englianos.

The few trenches opened on the palace site in this first season, though, as we have already admitted, insufficient to clarify the general plan of the building, were nevertheless adequate for the purposes of our preliminary campaign. At the very outset of

our explorations the site of a great stronghold, unquestionably the capital of this whole district in Mycenaean times, which we were seeking, has been definitely found, and we are thus able to lay our plans for a careful methodical excavation of the whole complex. It will probably require some years to do the task properly; for the whole of the palace, standing by itself alone on the plateau, must be uncovered; the lower town which, according to surface indications, was clustered all about the citadel on the steep surrounding slopes, must be investigated; and among the remaining unexcavated tholos tombs in the neighborhood we may hope to find at least one with its royal treasures still inviolate.

At a moment when systematic excavation of the palace is only about to begin it might seem indiscreet to advance categorical conclusions regarding the identification of the site. The high interest of the problem may serve as an excuse, however, if an excuse be needed, for discussing the matter at this stage, in closing our provisional report; and the very limited range of possibilities open, in any case, leaves little room for error. For there surely can be no doubt that we have found the Pylos of King Nestor, whose dominion extended over nine cities along the western shore.

Through the whole body of Hellenic tradition relating to the Heroic Age a single dynasty of rulers is accredited with the overlordship of southwestern Greece, and the most famous king of the Neleid line, sage Nestor, is a peer and equal among the Achaean leaders at Troy. Though presumably represented by subordinate chieftains in his many towns, so far as the literary records tell, he clearly had no rival of like standing anywhere in the district. His royal residence might then confidently be envisaged as a palace, built on a scale commensurate with that of the abodes of the other Achaean kings, including Menelaos and even Agamemnon himself. It is just such a palace that has now been discovered at Ano Englianos, the chief citadel of Western Messenia in Mycenaean times.

The descriptive epithet "sandy," which Homer applies to Pylos, would fit equally well scores of places along the hundred kilometers or more of shore-line extending from the Alpheios to Navarino Bay, and it cannot be taken as designating a distinctive topographical feature monopolized by any one spot within that area. It is apposite enough, so far as our site is concerned, for the vicinity abounds in sandy beaches; and although our palace does not stand itself directly on the sea, it had easy access to a sandy port either on the Bay of Pylos, or in the snug little harbor of Voidokoilia, just below the acropolis of Koryphasion, or on the open strands farther to the north. Far better than Professor Dörpfeld's site at Kakovatos, more than 50 km. away to the northward (as the crow flies), our palace at Englianos corresponds with the geographical indications given in the Odyssey; and it agrees with the conservative voice of Greek tradition that placed Nestor's domain in the immediate district of the homonymous classical city and Bay. We venture therefore without hesitation, even in these early phases of our investigation, to identify the newly found palace at Ano Englianos as the home of King Nestor, the Sandy Pylos of Homer and tradition.

THE NATIONAL MUSEUM, ATHENS

THE UNIVERSITY OF CINCINNATI

K. Kourouniotis

CARL W. BLEGEN

DISCOVERIES IN THE AGORA IN 1939

The American School's excavation of the Agora of Athens was continued last Spring for the ninth year on the large scale customary in the Agora and produced extensive and important results, the more significant of which will be briefly described in this report. The work of the season was concentrated in large measure on the southern border of the American Zone, which lies on the lower slopes of the Areopagus. There the deposit of earth above bedrock was shallow, some cellars of modern houses being cut in the rock, but in contrast to the small amount of earth

removed from that region the accumulation was deep in the block in the southwest corner designated for the site of the new museum, so that the total tonnage of earth removed was greater than in any previous season, amounting to 56,000 tons.

The topographical discoveries of the year were few, as was to be expected, since most of the landmarks of the area had already been identified, but those which were made confirm the interpretation of the topography of the Agora proposed by the excavators, and nothing was uncovered which in any way alters that interpretation. One significant discovery, however, was made, which provides valuable evidence for the course of the street of the Panathenaia at its northern end. This is a boundary stone, which was found standing in its original position in the extreme northwest corner of the area and is shown in



Fig. 1-Boundary Stone of Kerameikos

position in fig. 1, to its full height of 1.47 m. The shaft is made of Hymettian marble, with the upper part of the front surface smoothed to receive the inscription. Below that the surface is decoratively chipped and still lower where the end of the shaft was buried in the ground the marble was left in a roughly hewn state. The inscription, HOPOS|KEPAMEIKO, is written with carefully carved letters of the early part of the fourth century. The stone faced north on a contemporaneous street which was the main thoroughfare between the Agora and the Dipylon, and had its outer end at the Dipylon marked by similar stones.

The discoveries of the year include the usual great variety of types of antiquities and cover a wide range of time. Again this year the earliest remains belong in the Stone Age and they by their excellence testify to the high degree of technical skill attained by the people of that period in handling their primitive tools and implements. The Neolithic products were secured from ten wells, which were situated on the rocky hillside of the Acropolis in the vicinity of the Klepsydra, where similar wells had previously been cleared. These wells are usually shallow pits cut in the bedrock, but one of them extends to a depth of 7.70 m. and has neatly cut walls which prove the technical skill of these early craftsmen. It is probably only a coincidence that from this best hewn well came one of the finest vases, a highly burnished hand-made bowl.

Two other wells produced each a handsome vase of hand-burnished red ware (fig. 2). They have rims and low bases, perforated on each side by two holes which are aligned with holes in horizontal projecting bands set just below the rims. These no doubt served for the passage of withes or thongs by which the vases could be carried, or their lids could be kept in place. These are unusually fine specimens of Neolithic ware, and on them the linear decorations made by white painted stripes are fairly well preserved. These new additions to the Agora collection of Neolithic pottery make it the richest of any from the southern part of Greece. Moreover, a discovery in these wells which may prove of great importance is that of the skeletal remains of two human beings, whose skulls are of primitive type with sharply receding forehead. But since it has not yet been possible to mend and study these remains anthropologically, nothing further can be said of them at this time.

The people of the Stone Age were succeeded by several distinguishable occupations of prehistoric times, of which substantial remains have been found in the Agora in previous campaigns, but the important prehistoric discoveries of the past season belong to the third and latest and most developed stage of that culture. While scraping the rock in the course of the investigation of the few undisturbed ancient deposits on the lower slopes of the north side of the Areopagus, the surprising discovery was made of a large chamber tomb of the Mycenaean Age. The position of the tomb, indicated by an arrow, in relation to the Acropolis and the Areopagus is shown in fig. 3, a view toward the southeast, taken from the roof of the Hephaisteion. Since the chamber was cut in the bedrock its site was to a certain extent at least determined by the nature of the rock. The Areopagus is part of the same ridge as the Acropolis and its upper part consists of the same hard limestone, in which the hewing of a chamber would have been extremely difficult. But at a certain point on the lower slope the geological formation changes and the stone becomes the soft shale which appears as the bedrock generally throughout the Agora. This character of the rock permitted the original cutting of the chamber and also probably accounts for the preservation of the contents of the tomb, for the roof was found to have fallen in and the chamber was filled with large and small pieces of splintered rock.

The chamber was entered from the north side by a dromos, which was cut in the bedrock and is preserved for a length of eleven metres from its outer end to the doorway of the chamber. Originally its length had been somewhat longer, but at its north end it had been cut in the late Roman period by a retaining wall, shown in the foreground of fig. 4. The sides of the dromos, which are neatly cut in the bedrock, have a slight inward slope, so that the average width at the bottom of the passage is two



Fig. 2. - Neolithic Jars



Fig. 3. — View of Excavated Area to Southeast from Roof of Hephaisteion. Arrow Points to Site of Mycenaean Tomb



Fig. 4.—Dromos of Tomb: View to South Toward Doorway

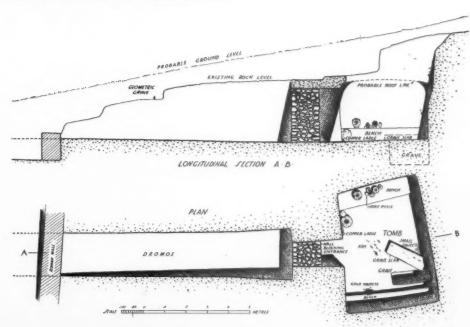


Fig. 5. - Plan and Section of Tomb. Drawn by Piet de Jong

metres, while at the top it is about one and a half. The dromos contained a filling of clean greenish earth, in which were some small stones and a very few Mycenaean sherds. Nothing of a later period was found in it except where encroachment had occurred for the digging of several Turkish pits. The dromos led to a doorway cut in the rock which was blocked with carefully packed stones, and evidently had not been entered since the original interment. This doorway is actually a passageway, 2.40 m. long by 1.20 m. wide, leading from the dromos to the chamber, and the wall blocking it had the substantial thickness of 1.40 m.

The ground plan of the tomb (fig. 5) shows the dromos with the Roman wall cutting its outer end, the narrow passage leading into the tomb blocked for more than half its length by a stone wall, and the chamber as it appeared after it had been cleared. In the longitudinal section the relationship of the roof of the chamber to the existing rock level and to the original ground level is clearly seen, and it is evident that the hewers of the chamber brought its height close to the surface of the rock over part of the area, not leaving sufficient rock in place for a margin of safety, an oversight which accounts for the early collapse of the roof.

The walls of the chamber, measuring approximately 5.90 m. by 4.30 m., are not symmetrical, nor is its original height, which at the highest point is 2.75 m., uniform, but such irregularity is not surprising in view of the fact that the chamber was hewn out of the solid rock. The roof had entirely collapsed except for a small bit in the northwest corner, but the line of the original cutting can be traced. The chamber was filled with broken pieces of the bedrock from the roof, but on the west side there were also large and small chunks of limestone which had been built into a crude wall along the side of the room. In this mixed filling on the west side a few Mycenaean sherds were found, while none came from the filling of bedrock on the east side.

When the chamber had been cleared a rock-cut bench, 75 cm. wide and 60 high, was revealed, extending along each side wall. Beside the west bench, in the southwest corner of the room, was a cist grave, cut in the bedrock, which had been covered by a stone slab, but this was found in a diagonal position beside the grave and had apparently been lifted at the foot of the grave and shoved to one side (fig. 6). The grave did not contain bones or offerings of any kind but on the floor of the chamber beside the cover slab lay a group of small objects comprising a bronze mirror, a small ivory box, and ivory pins, and on the floor north of the grave were three piles of gold ornaments. These objects as well as the grave and the west bench all lay beneath the rough wall built along that side.

The bench along the east side of the room was covered by masses of fallen bedrock and earth, in which no sherds or other objects were found. On the north end of the bench six vases and a cylindrical ivory box were uncovered, standing in their original positions; the vases had been shattered when the roof of the chamber collapsed, but the pyxis was still intact. Against the north wall of the chamber, between the doorway and the east bench, two large vases had been placed on the floor and beside them was a copper ladle. After the tomb had been cleared and the vases had been cleaned and mended, they were replaced on the bench and floor so that they could be photographed in the positions where they had been placed at the time of dedication (fig. 7).

The six vases which stood on the east bench are fine examples of Mycenaean pottery, of characteristic shape and decoration. The largest vase in the group is an amphora, which is impressive for its size (height: 48 cm.) and for the graceful simplicity of its decorative design (fig. 8). The group included two other amphoras, of which one is illustrated in fig. 9, a monochrome spouted jug (fig. 10), and two alabastra (fig. 11), one superimposed on the other. The bottoms of the alabastra are decorated with concentric circles and this type of decoration has been accepted as a criterion of chronological significance; vases of this shape with wave-line decoration are assigned to the Late Helladic II period, those with concentric circles to Late Helladic III. These vases are products of a single epoch and exact parallels for their shape and decoration occur among the discoveries made in Mycenaean tombs



Fig. 6. - Cist Grave in Floor of Tomb

at the Argive Heraeum and elsewhere, which are dated in the early part of the third Late Helladic period, that is, at the beginning of the fourteenth century B.C.

The ivory toilet box, which stood on the bench with the vases, is a masterpiece of artistic design and of technical execution (fig. 12). It was made from a large tusk and its size is remarkable, the height on the inside being 12.1 cm. and the diameter of the lid measuring 11.2 cm. The exterior height is 16 cm., measured with the addition of the lid and of a circular plaque at the bottom, corresponding to the lid, which was attached to the floor of the box by three ivory dowels. The interior was lined with thin strips of tin, so that the pyxis was presumably used as a container for ointment or some oily substance which, in the absence of such a lining, might have soaked into and discolored the ivory.

The top of the lid and the sides of the box are closely covered with decorative scenes, carved in relief, representing an attack made by griffins on a herd of deer. On the lid one griffin is shown swooping down with spread wings on two stags which he has knocked upside down (fig. 13). The griffin is of the Mycenaean type, with



Fig. 8.—Amphora with Nautilus Design. From a Painting by Piet de Jong



Fig. 9.—Amphora with Scale Pattern. From a Painting by Piet de Jong

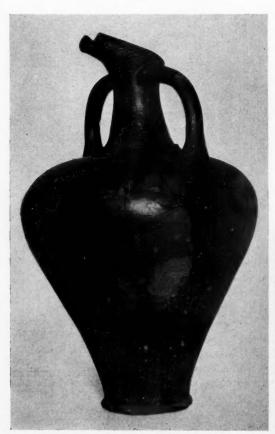


Fig. 10. - Monochrome Spouted Jug



FIG. 11.-ALABASTRON. FROM A PAINTING BY PIET DE JONG



Fig. 7.—Dedicated Offerings, Cleaned and Mended in Original Positions



Fig. 12. - Ivory Pyxis



Fig. 13.-Lid of Pyxis

multiple-feathered crest and with spirals at the base of the neck and at the start of the wings on the shoulder. The composition of the scene has been admirably adjusted to the circular area of the lid, with the curved backs of the deer fitted neatly to the lower periphery, and with the long hind legs of the deer in the upper right segment balancing the wing and the curved tail of the griffin on the left.

On the side of the pyxis two griffins are represented in an animated scene attacking four deer (fig. 14). The griffins are approaching their prey from opposite sides, the one on the left flying down with a great spread of wing and thrusting his claws into the hind quarters of a stag. The griffin on the right swoops over the ground, and the wind produced by the sweep of his wings has bent over a small tree or shrub seen below the body. This griffin has seized with his left paw a struggling deer which he holds straight up before him, while with his right paw he grasps a large running stag at the base of the neck. The originality of this artistic conception is matched by the skill with which the figures are carved. In the case of the central stag, where the surface of the ivory is better preserved than elsewhere, one can especially appreciate the masterly technique of the artist in the accurate modelling of the straining muscles and in the delineation of the bony structure beneath the skin.

Another remarkable feature of this composition is the use of perspective in the treatment of the fourth deer, which is trying to escape from the slaughter. This animal is shown in the mid zone between the two main combats, leaping over some stones or shrubs. Landscape is also indicated by the large bush beneath the griffin on the right, and by other small shrubs in the background. The ornate projecting handles, made in the form of animals which might be considered as belonging to the hunt, do not disturb the general design. Thus every detail of this composition has been carefully and skillfully planned and has been wrought with a technical perfection which inspires the scene with life and action and truth to nature in spite of the presence of fantastic monsters which have evidently been selected for their highly decorative qualities.

The small objects from a lady's boudoir, found on the floor of the chamber beside the cover of the grave, had probably been removed from the grave and had been overlooked when the body was carried out. The objects, which prove that the burial was that of a woman, are ivory pins, two large ivory bars with hinged clasps for use in the hair, a bronze mirror (diameter: 11.5 cm.), and a small ivory toilet box (fig. 15). The pyxis, although only five centimeters high, is made and decorated with as much skill and artistic feeling as were noted in the case of the large pyxis. Its surface is entirely covered by a carved nautilus design, with its units arranged in three horizontal rows, the carving of the delicate shells being exquisitely done and producing a rich decorative effect.

Ornaments made of thin sheets of gold were found mainly in three groups heaped together near the north end of the grave, though a few pieces were scattered elsewhere in the chamber. They are of several different types: large pear-shaped leaves with spiral designs (average height: 5 cm.), simple rosettes of two sizes, and plain discs (fig. 16). Most of them have small holes punched along the edges so that they could be sewed on cloth, but some of all types are unpierced. Ninety-seven of these ornaments were secured, besides eighteen other fragmentary pieces of gold. They



Fig. 14.—Scene on Pyxis. Developed Drawing by Piet de Jong

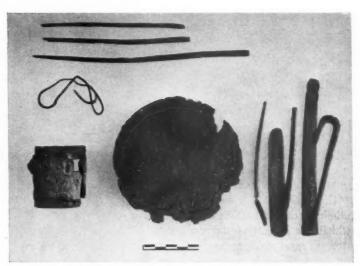


Fig. 15.—Small Objects from Floor of Tomb

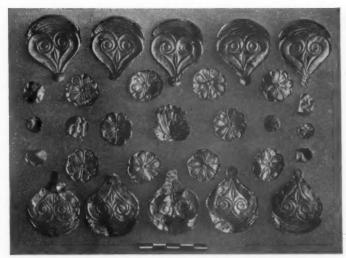


Fig. 16.—Gold Ornaments from Floor of Tomb

had apparently been gathered for removal from the tomb, but for some unknown reason had been left on the floor, like the toilet articles abandoned beside the cover.

The state in which the tomb was found provides the clue to its history. The size of the structure and the quality of the offerings indicate that it was a royal tomb, and the date fixed by the pottery is the early part of the fourteenth century, when Erechtheus was King of Athens. One burial only, that of a woman, was made in a grave cut in the floor in one corner of the chamber. A sacrificial ceremony of some kind was held, since much carbonized matter remained on the floor in the centre of the room, and valuable offerings were dedicated. The door was then blocked with a stone wall and the dromos was filled with earth, and neither was ever again entered, for before another burial could be made the roof of the chamber collapsed.

The tomb was not left entirely untouched in its ruined state, for the evidence shows that a trench had been dug just over the site of the grave, so that the body and offerings could be removed for reburial elsewhere. The trench was later filled by a wall of earth, split bedrock, and heavy chunks of limestone which had never subsequently been disturbed. In the hurry of removing the body some of the small offerings were left on the floor of the chamber near the grave cist. The east half of the tomb was not dug out and the dedicated objects which had been deposited there remained buried beneath the débris.

This discovery is of significance for our knowledge of the history of Athens, since for the first time a tomb has been uncovered belonging to the members of the dynasty who occupied the "strong house" of Erechtheus on the Acropolis, and both the elaborateness of the burial and the richness of the abandoned offerings refute the theory that Athens was a poor and unimportant settlement in the Mycenaean Age. The definite determination of the site of a tomb of the Mycenaean Lords of Athens, which has hitherto long been sought in vain, predicates the existence of other contemporary tombs in the immediate neighborhood, but while such tombs may have been located in the same horizontal stratum of the Areopagus hillside, it is by no means certain that any traces of them will have survived, since this slope has been cut and dug for subsequent building operations extending almost continuously down to modern times.

The possible fate of other neighboring tombs is suggested by the condition of one uncovered about thirteen metres west of the large tomb. This had originally been a circular chamber with an estimated diameter of about three metres and with a cist grave cut in the floor, but little of the structure remained, for part of the rock had been cut away, a Roman drain had been laid across the floor and the cist had been used as a modern cesspool. In spite of these mutilations, however, some remains of the original burial had survived, including small pieces of bones, fragments of pottery, and one complete false-mouthed jar (fig. 17).

A grave of a later period partly overlay, probably by accident, the dromos of the Mycenaean tomb and, although it was actually only half a metre below the modern surface and had been disturbed by intrusions of the Turkish period, fragments of bones and several vases were preserved. The vases are pyxides, indicating that the burial was that of a woman; one is practically complete (fig. 18), another has only part of the bowl preserved, while the third piece is a huge lid with a small two-



Fig. 17.—Stirrup Vase from Small Tomb. Painting by Piet de Jong



Fig. 18. - Geometric Pyxis. Painting by Piet de Jong



Fig. 19.-Lid of Geometric Pyxis. Painting by Piet de Jong

handled bowl attached to its top by a thick collar (fig. 19). These vases belong to the late Geometric type, dated at the end of the eighth century B.C.

Other late Geometric graves were found similar to those uncovered in earlier campaigns, but a more surprising discovery was that of a later cemetery situated in the southwestern corner of the Zone in the area designated for the site of the new Agora Museum. Most of the graves date from the sixth century, but the remains show that the cemetery was in use from the end of the eighth century to the end of the sixth.



Fig. 20. - Vases from a Sixth-Century Grave

Some of the graves contained imported vases from Corinth and Asia Minor, together with Attic black-figured ware. The contents of one grave, which are shown in fig. 20, dated about the middle of the century, included four Attic lekythoi and three small jars of a type common in Lydia. The presence of this cemetery delayed the preparation of the site for the Museum, so that it was not possible to begin construction this year. As soon as work can be resumed the building will be erected and then the blocks must be excavated which are now occupied by the temporary Museum and by the workrooms and offices of the staff.

T. LESLIE SHEAR

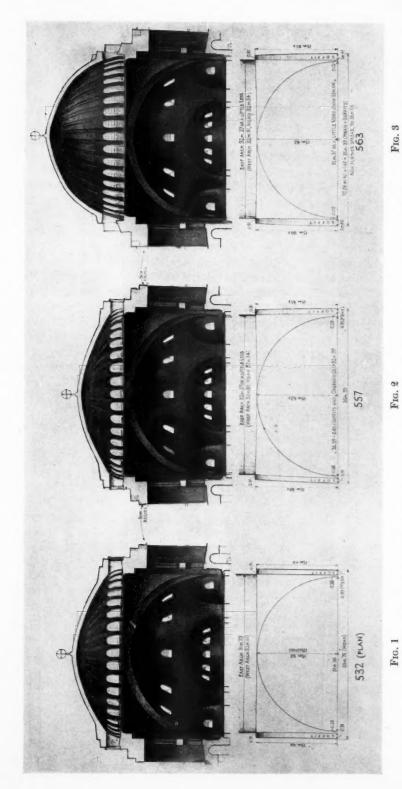
PRINCETON UNIVERSITY

THE FIRST DOME OF ST. SOPHIA AND ITS REBUILDING

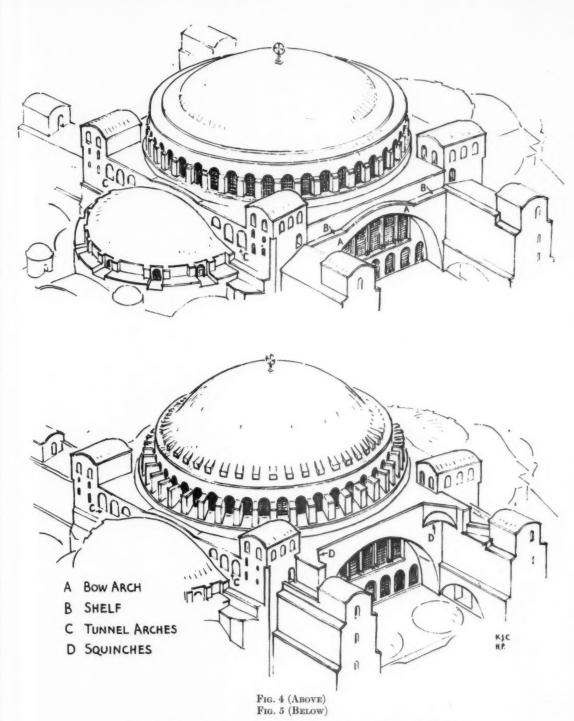
THE forthcoming first number of The Bulletin of the Byzantine Institute, delayed by the war, will contain an article under the title of this compte-rendu, giving in detail the results of my recent examination of the masonry of the venerable edifice. The work was done under the auspices of the Byzantine Institute, in connection with Mr. Thomas Whittemore's great work on the mosaics, and in cordial coöperation with Dr. William Emerson, who is in charge of the architectural study. It is clear from the new observations that the dome and four great arches of St. Sophia were laid out as approximate catenary curves, rather than circular segments (figs. 1-3). The supporting arches and piers were pushed out of the perpendicular before the building solidified. Earthquake damage dating from December 14, 557 was under repair when on May 7, 558 there occurred a new fall of vaulting. The lateral great arches, but not the "bow" arches, were rectified, as shown in figure 3, before the new dome (20 Byzantine feet higher) was undertaken; and the exterior loading and buttressing (figs. 4 and 5) probably date from this time. The loading of the pendentives, originally a series of small tunnels, has since been made solid, while the four stair turrets which formerly strengthened the silhouette of the building have been removed—the last one less than a century ago.

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SECTIONS OF THE DOME OF St. SOPHIA, SHOWING THE DIMENSIONS OF THE ORIGINAL PLAN, THE DEFORMATION (557) AND THE RECONSTRUCTION (558-563).



BIRD'S-EYE VIEW OF THE ORIGINAL DOME AND OF THE REBUILT DOME

EXCAVATIONS AT CORINTH, 1938-1939

In the autumn of 1938 and in the spring of 1939, excavations and investigations were conducted at Corinth in three areas. The work in the autumn, for a period of seven weeks, was carried on in the South Stoa, on Temple Hill, and in a small area adjacent to the west side of the museum. The spring campaign of six weeks was concentrated on the completion of the excavations west of the museum and the refilling of that area.

The excavations at the west end of the South Stoa down to the classical level were completed in the spring of 1938, and in the autumn Professor Broneer began the investigations of the three westernmost shops and their store-rooms. Many of the orthostate and wall blocks of the Stoa had been shifted somewhat and included in later walls. These walls were removed and the blocks replaced on the lines of the Stoa walls. Beneath the floors of the shops there was a considerable depth of classical fill, which contained quantities of pottery and miscellaneous finds. The fill under the floor of store-room XXXI contained a large number of pieces of red, white, blue and yellow coloring matter. The west end of the Stoa is built over the remains of Greek houses of the fifth century, like those found previously in the South Central area of the Agora.² In the stereo under Shop XXXII were found cuttings for three graves, but the contents had been completely removed.

In the colonnade of the Stoa, in front of Shop XXXI, was found a fine grave of the Early Byzantine period. The sides of the grave were lined with marble slabs, probably removed from the Roman pavement of the Agora, and similar slabs were used for the cover (fig. 1). At the right side of the skeleton lay a long iron sword. The right hand held a silver and bronze trinket; the left grasped an iron dagger. At the waist was found a fine bronze buckle and a coarse pot stood at the feet. Traces of iron found under the skeleton probably belonged to some piece of armor.

Some investigations in the middle of the South Stoa in front of Shop XXII revealed a large manhole, which proved to be part of the Peirene system. The manhole fill contained very fragmentary pottery of the fifth and early fourth centuries. At the bottom of the shaft were found many fragments of a terracotta altar of peculiar scheme. On a high rectangular base was superimposed a cylindrical section; both base and cylinder were hollow and relatively thin-walled. The only remaining decoration (fig. 2) comes from the top of the base in the angle forming the transition from the square to the circle. The technique is red-figured; the ground is covered with a matt, dark brown paint, which is also used for details in the reserved figure. The broad stripe at the edge of the himation is done with dull red paint. The fleeing female figure is painted in the style of the late fifth century.

¹The excavations were supervised as follows: Professor Oscar Broneer in the South Stoa, assisted for a short period by Dr. Josephine Harris; the author on Temple Hill and in the area west of the museum. Inventories were kept by Miss Sara Anderson, Miss Sara Atherton and Dr. Josephine Harris; Dr. Gladys R. Davidson is studying the miscellaneous finds of the fall campaign; Dr. Harris the coins. The architect for both campaigns was Dr. Wulf Schaefer. Evangelos Lekkas was foreman.

I am indebted to Professor Broneer for his constant help and advice throughout the two seasons.— This report was written at the request of the Director, Professor H. Lamar Crosby.

² AJA. xliii, 1939, p. 258.



Fig. 1.—Grave of Early Byzantine Period



Fig. 2.—Fragment from Terracotta Altar

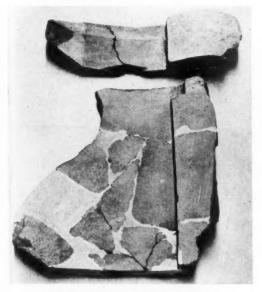


Fig. 3.—Tiles from Temple Hill



Fig. 6.—Fragment of Red-Figured Column-Crater

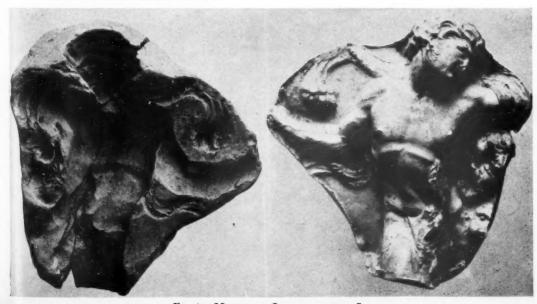


Fig. 5. — Mould and Impression from Iau

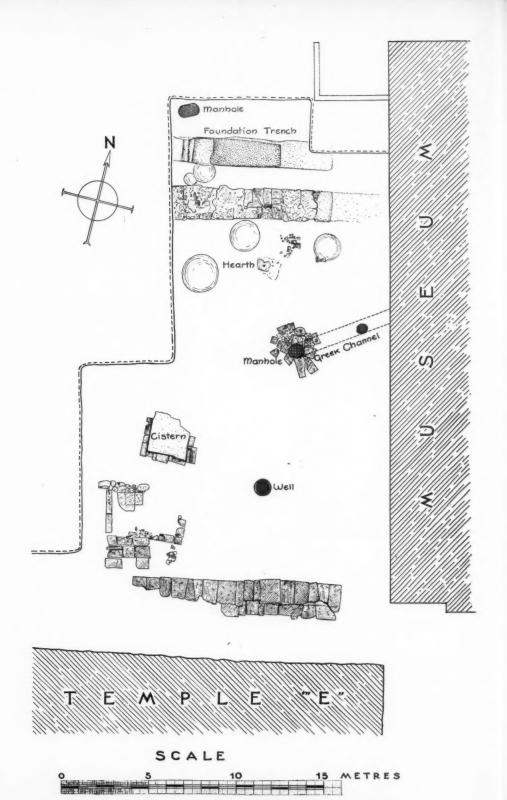


Fig. 4.—Plan of the Area West of the Museum, Corinth

In the autumn of 1938 the writer investigated about nine metres of the long stretch of fill under the north pteroma of the Temple of Apollo, the only ancient fill left within the temple area. There was a heavy mixture of poros chips in this fill, and it contained also many fragments of Late Corinthian and Conventionalizing pottery. These point to a date early in the second half of the sixth century B.C. as the most probable time for the construction of the temple. This evidence was confirmed by the excavation of more of the fill of working chips of stone, first found in 1937 in the north end of Trench V.2 The mass of dumped débris was cleared for several metres to the west of Trench V. It consisted largely of small chips of poros, brought to the edge of the hill and dumped, but apart from these chips there was one compact mass of large poros blocks and of fragments of architectural tiles. These, too, seem to have been discarded in a heap and then covered over by the smaller chips. The large ashlar blocks are of a very fine-grained poros, different from the coarser variety used for the Temple of Apollo. The pieces are from a wall 0.70 m. thick, with a finely dressed outer and inner face. At a distance of 0.14 m. from each face is a deep groove, parallel to the wall face and encircling the block. These grooves served to hold the ropes used in lifting the blocks into place—a very primitive method used only in early archaic construction. The terracotta fragments belong to large combination pan and cover tiles, 0.65 m. long, and to ridge tiles (fig. 3). The pan tiles are slightly concave; the cover sections are convex. The tiles are very thick and heavy, but are well made. Such tiles are certainly among the earliest of the archaic Greek architectural terracottas, perhaps to be dated early in the seventh century B.C. Both the blocks and the tiles show strong traces of burning. These remains are very likely from a small temple which preceded the Temple of Apollo on the hill and which was destroyed by fire in the sixth century.

In order to carry out a plan of landscaping around the museum, an area twenty-eight metres long and varying in width from twelve to seventeen metres was excavated, adjacent to the west side of the museum (plan, fig. 4). A small strip along the southern part of the west wall of the museum had been dug at the time when the museum was built and then re-filled. Trench XXXIII of 1901, which ran northwest from the northeast corner of the podium of Temple E, had cut into this area for about nine metres. Over all the rest of the area there was a post-classical fill, varying considerably in depth. Three large Byzantine pits intruded to a depth of about two metres from the surface, but almost no walls of this period were found.

At the north end of the area there was a trench for an ancient foundation, 1.50 m, wide and with a maximum depth of 2.70 m, which ran east-west. The stones of the masonry had been removed in the Byzantine period and the hollow had then been filled. The trench had been sunk to stereo, which was deeper at the middle than at the east and west ends, forming a natural ravine. The sides of the trench proved to be hard red fill of the prehistoric period. At a distance of 1.30 m, to the south of this trench and parallel to it is a heavy foundation, 1.70 m, wide. Its lowest course, which rests on the prehistoric fill, is made of large re-used blocks, many of which have dressed surfaces with mouldings. The blocks were imbedded in a mass

¹A more detailed report of these investigations has already been published in *Hesperia* viii, 1939, pp. 191–199.

² Hesperia vi, 1937, p. 490, fig. 1.

of Roman concrete. The construction resembles that of the podium of Temple E, to which this foundation is parallel, and with which it may have been connected as a temenos wall. About 6.50 m. to the south of the heavy foundation is a manhole, leading into a system of underground channels at a depth of ca. 10.00 m. below the surface. From the top, to a depth of 3.60 m., the manhole was lined with large reused blocks, like those employed in the foundation. The shaft was filled in the late Roman period.

There was very little classical fill in the area later than the fifth century B.C., but a few remains date from the middle of the fourth century. In the very northwest corner of the area is an oval manhole, giving access to another system of underground channels. The shaft had been filled about the middle of the fourth century B.C., and the fill contained numerous fragments of Corinthian and Attic black-glazed vases and much coarse pottery. Among the more interesting objects from the fill of the shaft is a terracotta mould for a male figure (fig. 5). The violent motion of the figure is accentuated by the lion's skin which flies out behind, held by the left arm. The excellent modelling of the figure is most closely paralleled by fine metal work of the fourth century. Also of the fourth century is a small eistern in the southwestern part of the area. The floor is of pebble mosaic, the walls of good Greek cement.

For about five metres along the southern side of this region there was a considerable quantity of fill of the early fifth century, from which came large quantities of pottery, figurines and lamps. Included in the pottery were fragments of a columncrater with red-figured decoration, in the style of the early fifth century B.C. (fig. 6). Only one small piece of the obverse panel was found, representing the rear part of a horse, in front of which stands a draped figure. The reverse panel is almost completely preserved: the representation is that of a comast scene with two youths, one of whom is playing pipes. Of the same period is the fill in a well in the southern part of the area. The upper 3.50 m. of the well-shaft were cut through the hard prehistoric fill and the rest was cut in the stereo. The well was filled about the middle of the fifth century, but the ceramic contents of the fill date back as far as the beginning of the sixth century. This is an unusually long span of time, for the fill was unstratified, and some fragments from top and bottom were found to join each other. Among about one hundred and fifty well preserved vases from the well there are several unusual pieces. A Late Corinthian skyphos in the "White style" has the bottom decorated with a siren, in the usual Corinthian incised technique (fig. 7). There are many fragments of Attic black-figured and red-figured ware and a large amount of Attic black-glazed pottery (fig. 8). In the latter group are two psykters with flanged rims designed to receive covers, and with handles consisting of double tubes with vertical string holes. The rest of the pottery is Corinthian black-glazed and unglazed ware, both fine and coarse. Among the fine unglazed vases are two mastoi (fig. 8). In the well were also found many terracotta figurines of late archaic types (fig. 9), some of which have their coloring well preserved.

Just to the south of the heavy stone and concrete foundation were found the broken pieces of a large clay hearth in the form of a disc, probably ca. 0.70 m. in diameter, ca. 0.03 m. thick, with a rim, 0.07 m. high, around the edge. The disc



Fig. 7a.—Corinthian Skyphos



Fig. 7b.—Decorated Bottom of Corinthian Skyphos

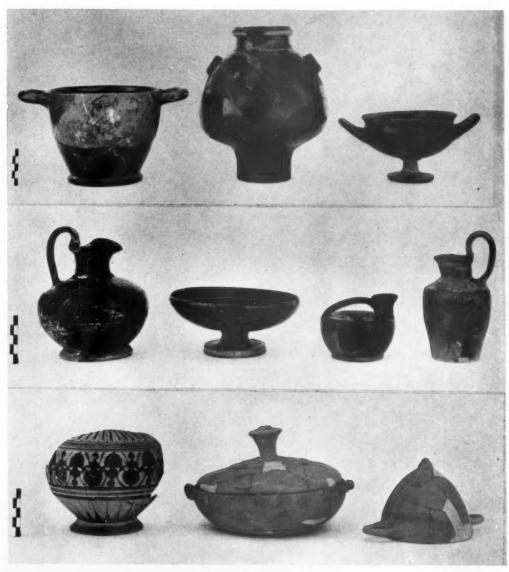


Fig. 8.—Pottery from the Well



Fig. 9. - Terracotta Figurines from the Well



Fig. 10. - Skyphos Found Near Hearth

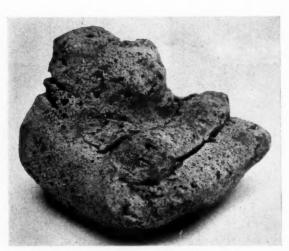


Fig. 11.—Seated Female Figure, in Three-Quarter View



Fig. 13.—Male (?) Figurine of Terracotta

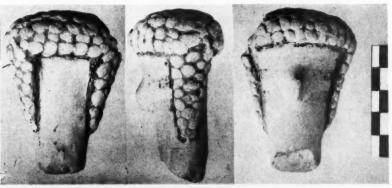


Fig. 12.—Rear, Side, and Front Views of Terracotta Head

had been baked on the top only, from the heat of the fires which had been burned on it. Around the hearth were lying several fragmentary Submycenaean and early Protogeometric skyphoi (fig. 10), together with fragments of larger vessels. The light buff fabric of these vases and their glaze, varying in color from black to red, is identical with that of Corinthian Geometric pottery. They seem certainly to be of local manufacture. A little to the northeast of the hearth were scant remains of foundations of a long outer wall and a narrow cross wall of a house, probably to be connected with the hearth. These discoveries are of great importance, for they form the first definite evidence of habitation in Corinth in this period.¹

Throughout the entire area, the later remains which have been described rested on prehistoric fill, the great depth of which was indicated in the large foundation trench and in the shaft of the fifth-century well. A large area of this fill was dug to stereo, which was reached at a depth of from 3.50 to 4.00 m. Throughout the depth of this fill there was no obvious stratified difference in the soil. The pottery, too, remained the same from top to bottom; it was all Early Helladic. The fill lacked any of the characteristic features of habitation débris, and it can only be concluded that it had been deliberately dumped here in the Early Helladic period, most probably to fill up the ravine which we know existed at this place. Everywhere else in the same vicinity have been found traces of habitation of this period, and such a project seems not at all unlikely.

The prehistoric pottery from this area consisted largely of the well-known types of Early Helladic wares, both the slipped and the glazed varieties. With this Early Helladic ware, however, a considerable quantity of pottery was found which has been classed as Late Neolithic. Most abundant among the early sherds were fragments of gray monochrome ware, identical in shape and fabric with sherds already known from Corinth.² There were also numerous fragments of polychrome ware, which was rare in the Neolithic deposits on Temple Hill, and many pieces of pottery decorated with matt paint. On the other hand, earlier Neolithic wares and later Neolithic "Urfirnis" pottery were totally absent from this deposit. The quantity of these wares, certainly in common use in the later Neolithic period, which have been found in this Early Helladic context, seems sufficient to suggest a definite continuity between the two periods. The continuance in use of the gray monochrome and mattpainted wares through the Early Helladic period would bring them to the threshold of the following period, in which similar wares again become predominant.²

In the prehistoric deposit were several fragments of terracotta figurines and numerous other small objects. One female figurine is similar to a specimen found on Temple Hill in 1937.⁴ A second piece represents a seated female figure (fig. 11), of which the part of the body above the middle of the torso is missing. She sits with her legs drawn up and folded in front of her, but not crossed. Incisions on the sides above the hips indicate folds of flesh. Figure 12 shows a large head, 0.07 m.

¹ The only Protogeometric pot previously known from Corinth is the jug found by Professor Shear in a Roman tomb (AJA. xxxv, 1931, p. 426, fig. 3). This, too, is of local fabric. Fragments of a jug were found this year in late fill in the southern part of the area, west of the museum.

² Hesperia vi, 1937, pp. 503-511.

² Valmin, The Swedish Messenia Expedition, pp. 244-246. ⁴ Hespera

⁴ Hesperia vi, 1937, p. 522, fig. 41.

high. The method used in delineating the features is very similar to that employed on a head found on Temple Hill.¹ The nose is plastic; on either side of it are two painted stripes, corresponding to incisions on the other head. The mass of hair on top of the head and a heavy braid down either side are elaborately rendered with small pellets of clay. The hair is outlined by a stripe of black paint. Very different from these figurines is the long, slender figure shown in figure 13. Although there are no clear indications of sex, the proportions suggest a male figure and the small breasts, formed of pellets, do not preclude this possibility. If, further, the object running diagonally across the middle of the torso is to be interpreted as a triangular dagger, the type usual in this period, it is obvious that a male figure was intended.

Fragments of a stone pyxis with vertically perforated lugs were found in the prehistoric deposit (fig. 14). The vase resembles Early Minoan vessels, but the



Fig. 14. - Fragments of a Stone Pyxis



Fig. 15.—Early Corinthian Aryballos

stone is a very soft soapstone of a mottled greenish gray color.

The only metal object found is a complete bronze awl. There were several terracotta spindle whorls, numerous pieces of obsidian and a few small celts.

In January, 1939, graves were reported in a field about a mile north of the village of Hexamilia and to the east of the site of Gonia. Excavations uncovered a group of five graves of the early fifth century B.C. The burials were all in sarcophagi of very soft poros. The contents of the graves were mainly Attic and Corinthian black-glazed vases, but there were a few late black-figured lekythoi and a lamp. In one of the graves was a fine Early Corinthian aryballos of the "Lion group" (fig. 15),2 decorated with a winged male figure or Boread running to the right.

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¹ Hesperia vi, 1937, p. 523, fig. 42.

² Payne, Necrocorinthia, p. 289.

HOW WERE IMPERIAL PORTRAITS DISTRIBUTED THROUGHOUT THE ROMAN EMPIRE?

The only discussion to date of this problem is that of E. H. Swift.¹ He explains the "remarkable uniformity in the rendering of certain minute iconographic details"² by supposing "that, for the production of imperial portraits outside Rome, use was made of standard types or canons which originated in Rome in authoritative works, and were then sent out in the form of clay or waxen models to be reproduced in monumental form in the provinces. These," he believes, "were commonly known as *imagines*" . . .³ "From the middle of the third century certainly, and most probably from the very beginning of the empire, the custom prevailed of officially sending forth, upon the accession of each new emperor, his portraits crowned with laurel to the provincial cities."⁴

Attractive as this theory is,⁵ it suffers the defect of being chronologically too all-inclusive. Is it not possible that the early empire differed as sharply from the later empire in its methods of distributing imperial portraits as it did in other matters? I believe there is evidence that it did. This evidence comes from the imperial portrait inscriptions—the inscriptions, that is, that record portrait dedications.⁶ They constitute the chief source of our knowledge of the chronology of imperial portraiture. With their help it is possible to learn the precise or approximate date on which about half of the portraits recorded by inscriptions of any particular emperor were erected or voted.⁷ In this paper the portrait inscriptions of only the Julio-Claudian successors of Augustus will be examined.

¹ "Imagines in Imperial Portraiture," AJA. xxvii, 1923, pp. 286-301. See note on page 617.

² Op. cit., p. 286. ³ Op. cit., p. 290.

⁴ Op. cit., p. 297. More emphatic is the statement on page 298: "Granting that all the accounts of this custom which have come down to us are of comparatively late date, I believe, nevertheless, that certain inferences may be drawn, not only from these late authorities but also from writers of the early empire, which show conclusively that the custom was coeval with the empire itself, and existed from the period of Caesar and Augustus onward."

⁵ Compare O. Brendel, *Die Ikonographie des Kaisers Augustus*, p. 13 and A. Zadoks-Jitta, *Ancestral Portraiture in Rome*, p. 109. The latter is critical, however, of Swift's discussion of the term *imago* and Roman ancestral portraiture.

⁶ For the criteria used in compiling them see my study, *The Portraiture of Claudius* (pp. 13-14), to which I shall hereafter refer as *PC*.

⁷Portrait inscriptions are no more exempt than inscriptions of other Roman monuments from the problem of whether their date is that of the decree authorizing the erection of the monument or the date of its dedication. Two famous examples of this problem are the inscriptions of the column of Trajan at Rome and his arch at Beneventum (CIL. vi, 960: Domaszewski, Philologus 65, 1906, p. 343; Lehmann-Hartleben, Die Trajanssäule, p. 6; Snijder, JdI. 41, 1926, p. 97; Richmond, PBSR. 13, 1935, pp. 1-2; CIL. ix, 1558; Petersen, RM. 7, 1892, pp. 239, 241; Groag, RM. 14, 1899, p. 273; Domaszewski, JOAI. ii, 1889, pp. 173–192; Wace, PBSR. 4, 1907, p. 261; W. Weber, Untersuchungen zur Geschichte des Kaisers Hadrianus, p. 7; Poulsen, RM. 29, 1914, p. 56; Snijder, JdI. 41, 1926, p. 110). The inscription that records the dedication of a portrait of Claudius by the Vicus Marosallensis in Belgica (CIL. xiii, 4565 = Dessau 7061), which records, exceptionally, both the date of its decree and the date of its dedication, best illustrates the problem for portrait inscriptions. It reads: Ti. Claudio | Drusi f. Ca[e]ear | Aug. German [ico] | pont. max. trib. | potest. iii imp. iii | p.p. cos. de[s. iiii] (cf. PC. 16, note 109 for this restoration) | vicani Marosa | llenses pub. dedicata viiii K. | Octob. anno C. | Passieni Crispi | ii T. Statlo Tauro co. The date of many portrait inscriptions, perhaps most, may therefore only represent the terminus post quem.

Before considering this evidence, however, or its significance, I should like to turn to the fact that gives rise to the question under discussion—uniformity of iconographic detail. A priori there are two ways by which it can be accounted for. One may either suppose that portraits found in the provinces were shipped from Rome ready-made or that provincial portraits were produced locally from models transmitted from the capital. Since there is evidence of considerable provincial production of portraits, the real problem is to discover the nature of the models. Did provincial artists use imagines of clay or wax, or even sketches, officially dispatched from Rome by the government or ready-made portraits that reached them from Rome through the usual channels of the art trade?

The first alternative assumes an active concern on the part of each new administration that the imperial portrait be disseminated as widely and speedily as possible. It also assumes that artists capable of reproducing marble or bronze portraits from official models were to be found not merely in the large cities but in the smaller communities as well. Both these conditions are recognized by Swift as fundamental to his theory.³ The basic assumption of the other alternative is that a new administration was, if not indifferent, at least unconcerned about the speedy or widespread distribution of the imperial portrait.

If it can be shown, then, that Julio-Claudian portraits were distributed neither speedily nor widely in the early period of a new administration, and that facilities for the mechanical reproduction of imperial portraits from official models were to be found in only a few centers of the empire, it follows that during the Julio-Claudian period use was not made of official imagines to facilitate the distribution of imperial portraits. To phrase it positively, if it can be shown that portraits of the Julio-Claudian emperors were erected before their accession in the chief art centers of the empire, it is clear that models for their post-accessional portraits were immediately available. There was no need to wait for official imagines.⁴ Not only would official imagines be unnecessary, but, since there was no need for them, it is most unlikely that their use would occur to any one.⁵ If, moreover, it can be shown that after the

¹ The portraits found at Corinth are of Pentelic marble (AJA. xxv, 1921, p. 142; cf. Lippold, Kopien und Umbildungen, pp. 62, 68). At Olympia several portraits made by Athenian artists (Olympia iii, pp. 244–248, 252–258; Loewy, Inschriften Griechischen Bildhauer (which will be referred to hereafter as Loewy), 331–335) survive. Another Attic artist who made a portrait of Claudius set up in Athens was Euboulides of Piraeus (IG. ii–iii², 3274; Loewy, 324). From Pergamum comes the inscription of the maker of a portrait of Germanicus, Glycon (IGR. iv, 326). At Halicarnassus Archidamus, the son of Nicomachus, made the portraits of Tiberius and Drusus (CIG. 2657; Loewy, 356). For the activity at Alexandria see my discussion of lines 28–51 of London Papyrus 1912, in which the portraits voted Claudius by the Alexandrians are listed (PC. pp. 6–13; compare also page 3 for portraits of porphyry brought to Rome from Alexandria by Vitrasius Pollio in 41/42 A.D.).

² Coins can hardly have served as models for plastic portraits in the round. Besides being too small and too lacking in characteristic detail, particularly in the earlier issues of a new emperor, they represent the imperial features in profile only. The few extant full-face coin portraits of the Julio-Claudians are of even less value as models for plastic reproduction (BMCRE. i, 17, 90, pl. 3, 13 and i, 132, 85,

90, pl. 24, 4-5).
³ Op. cit., pp. 297, 298, 300.

⁴In most instances the first of the pre-accessional portraits of successor-designates must have reached the chief provincial art centers from Rome through the art trade. But C. Caesar, Tiberius, Germanicus, Caligula (until the death of his father), and Drusus travelled extensively. It is entirely possible that some of their provincial portraits were modelled from life.

⁵ The factors involved in the problem of what models were used for imperial coins issued in the provinces and for the *imagines* of the imperial military standards—if these were not distributed

accession of a new administration the distribution of plastic portraits was slow rather than rapid, it cannot be argued that, in spite of available provincial models, official *imagines* were none the less sent out. Finally, if it can be shown that facilities for reproducing portraits mechanically did not exist in smaller communities but that they imported their portraits of the imperial family ready-made from the nearest provincial art center, the conclusion seems inevitable that distribution of imperial portraits throughout the empire was effected privately through the channels of the art trade. It is my purpose to try to show that this was the case.

The Julio-Claudian succession begins with Tiberius. Long before his adoption by Augustus in 4 A.D. his eligibility to succeed his stepfather was there for all to see. There is no clearer evidence on this point than that furnished by the inscriptions that record the portraits set up before his accession. They show that as early as 16 B.C. a portrait of Tiberius stood in Tarraco; that at Olympia four portraits of Tiberius were set up before 14 A.D., the earliest of these dating from 20-8 B.C.² and another from 15-9 B.C.³ Between 13-8 B.C. a portrait was erected at Epidaurus.⁴ Before 4 A.D. three other portraits were set up in Spain at Carthago Nova, Ulia, and Italica. No less than five portraits of Tiberius were set up at Athens before 4 A.D. and another in 4 A.D. when Tiberius was adopted by Augustus. At Pergamum two portraits were dedicated before 4 A.D.8 The only Italian inscription recording a portrait dedicated before 4 A.D. comes from Centum Cellae in Regio vii.9 In 4 A.D. portraits of Tiberius and Drusus were erected at Halicarnassus. 10 Between 4 and 14 A.D. portraits were set up at Praeneste, Bagacum, Axus, Sardis, and Smyrna. 11 In 7/8 A.D. the portrait of Tiberius appeared with those of nine other Julio-Claudians on the arch at Ticinum.¹² Finally, a portrait was erected in 13/14 A.D. at Thespiae.¹³

The total number of these portraits is twenty-six. If the doubtful inscriptions are included, the total becomes thirty-one.¹⁴ What percentage of the pre-accessional

ready-made from a central point—are quite different from those affecting sculptured portraits and cannot be considered here.

¹ CIL. ii, 6080.
² Olympia v, 220 = Sylloge ², 357.

Olympia v, 369. The other two were set up before 4 A.D. (op. cit., 370-371).
 IG. iv², 597.
 CIL. ii, 5930 = Dessau 144, 1529, and 1113.
 IG. ii-iii², 3243-3247.

 $^{^7}$ IG. ii–iii 2 , 3254. This base was found in the same spot with three other bases inscribed with the names of Augustus, Germanicus, and Drusus (IG. ii–iii 2 , 3253, 3255, 3256). The size of the bases and the letters of their inscriptions is almost exactly identical. There can be little hesitation therefore in accepting the view that these four portraits were set up in 4 A.D. at the time that Augustus adopted Tiberius and he in turn Germanicus.

* IGR. iv, 320–321.

* CIL. xi, 3517 = Dessau 145.

¹⁰ CIG. 2657 (cf. Loewy, 356). There is no reason to doubt the correctness of Boeckh's dating of this inscription which Hirschfeld and Loewy accept. The inscription reads: Τιβερίου 'Ιουλίου | Καίσαρος || καὶ Δρούσου 'Ιουλίου Καίσαρος | 'Αρχίδαμος Νικομάχου ἐποίησεν. For Archidamus compare Loewy, 356 and Robert (RE. ii, p. 470, 12). Robert identifies another base signed by Archidamus of Miletus (Loewy, 200) as the work of the same Archidamus who made the portraits of Tiberius and Drusus.

¹¹ CIL. xiv, 2910b, xiii, 3570; IGR. i, 958, iv, 1503 (it is barely possible that this inscription was set up after 17 A.D.; compare IGR. ad locum), iv, 1391.

¹² CIL. v, 6416, 4 = Dessau 107, 4. ¹³ IG. vii, 1837.

¹⁴ Before 4 A.D.: Emerita (CIL. ii, 476: with some doubt I have elsewhere (PC. pp. 15 and 106) accepted the restoration of this inscription to Claudius, though it may be restored either to Tiberius or Claudius); Palaepaphus (IGR. iii, 943: this fragmentary inscription is all but certainly not an inscription of Tiberius). 4-14 A.D.: Ruessium (CIL. xiii, 1590: the inscription is fragmentary); Vienna (CIL. xii, 1844: the inscription is fragmentary); Pergamum (IGR. iv, 322: the inscription is fragmentary).

portraits of Tiberius once in existence this number represents cannot be determined, but it is obvious that provincial artists did not lack for models of the emperor's features when the news of Augustus' death reached them.

The inscriptions that record the erection of portraits of Germanicus and Drusus, the heirs apparent of Tiberius, also prove that models for their portraits, had they lived to become emperors, were available outside Rome in large numbers. At Athens, as we have already seen, portraits of Germanicus and Drusus were set up in 4 A.D. together with those of Augustus and Tiberius. In 7/8 A.D. their portraits were included among the ten set up on the arch of Ticinum. Other joint dedications to Germanicus and Drusus made before the former's death were to be seen at Forum Clodii, at Mediolanum Santonum, at Olympia, and at Apollonia. The first is dated 18 A.D., the second between 18–20 A.D., and the other two between 14–19 A.D.

Of the portraits of Germanicus erected separately the two earliest are the one set up between 7–12 A.D. at Nomentum ⁸ and that dedicated in 11 A.D. at Apamea. ⁹ Between 12–18 A.D. portraits were erected at Corcyra, ¹⁰ at Eumenia, ¹¹ and at Cabeza del Griego. ¹² Between 17–19 A.D. a portrait was erected at Olympia commemorating

The total number of inscriptions recording portraits of Tiberius erected in the first fifty-six years of his life, even if the doubtful inscriptions are accepted, is in glaring contrast with the results of Curtius' investigation of the youthful portraits of Tiberius (RM. 50, 1935, pp. 286–320). Curtius finds that there are still extant thirty-three sculptured portraits of Tiberius representing him between his fifth and twentieth years of age, and six portraits from the same period on gems and metal. In my study of Claudius' portraiture I found that the ratio between the extant portraits and the portrait inscriptions of Claudius is approximately three inscriptions to one extant portrait. If this ratio holds for Tiberius' portraits, it is unlikely that all the portraits identified as the youthful Tiberius have been correctly identified.

¹ Compare p. 603, note 7.
² CIL. v, 6416, 2-3 = Dessau 107, 2-3.

³ I have excluded the inscriptions which refer to his second consulship and imperatorial salutation, since I believe these were erected, at least in greater part, after his death, though their date is 18 A.D. Compare the exaggerated estimate, as I have tried to show in a note to be published in *Classical Philology*, that Tacitus makes of the number of portraits erected in honor of Germanicus immediately after his death (*Annals* ii, 83). Perhaps the undated inscription from Palmyra (*AE*. 1933, 204), which records a joint dedication to Tiberius, Drusus and Germanicus, should be included with the joint dedications listed above.

⁴ CIL. xi, 3308. Bormann (ad CIL. xi, 7552) believes that this inscription is to be associated with CIL. xi, 7552, which records the dedication of portraits of Livia, Tiberius, and Drusus which he further believes, rightly I think, are the portraits referred to in CIL. xi, 3303. This last inscription is dated 18 A.D. In it are recorded the various measures taken to honor the imperial family. Among these occurs the following statement: . . . item dedicatione statuarum Caesarum et Augustae mulsum et crustula pecunia nostra . . . dedimus . . . eius die dedicationis . . . vi Idus Martias qua die Caesar pontif. maximus felicissime est creatus.

⁵ CIL. xiii, 1036. In this inscription Germanicus is described as cos. ii, that is 18 A.D., and Tiberius, who was acclaimed imperator viii in 21 A.D.—the number of his tribunician power is broken off—as imp. vii.

⁶ Olympia v, 372. The date of this inscription, which records the dedication of portraits of Germanicus and Drusus in a quadriga, according to the editors, is based on the words τοὺς ἐαυτῆς εὐ[ε]ργέτας, which seem to indicate that they were still alive.

⁷ MAMA. iv, 143. This portrait was set up together with those of Divus Augustus, Livia, Tiberius, and Drusus and stood above a copy of the Res Gestae Divi Augusti.

⁸ CIL. xiv, 3942 = Dessau 173. In this inscription Germanicus is described as auguri, q(uaestor) only. He held the quaestorship in 7 A.D. (Dio 55, 31, 1) and was not consul for the first time until 12 A.D. (Dio 56, 26, 1).

⁹ CIL. iii, 334 = Dessau 174.
¹⁰ IG. ix, 1¹, 724.
¹¹ IGR. iv, 723.
¹² CIL. ii, 3104.

a victory in the chariot race.¹ In 18 A.D. three portraits were erected at Athens.² In the same year a portrait was dedicated at Alexandria.³ At Sparta a portrait was erected between 14–19 A.D.⁴ The portrait set up in the same period at Clazomenae may have been dedicated jointly with portraits of Tiberius and Drusus, but this is not certain.⁵

A portrait of Drusus was set up jointly with that of Tiberius at Halicarnassus in 4 A.D. 6 Before 11 A.D. his portrait was dedicated at Ostia. 7 Between 4–14 A.D. portraits of Drusus were erected at Altinum, Brigantium, Cabeza del Griego, Gortyna, Samos, and Pergamum. 8 Between 15–20 A.D. his portraits were set up at Caiatia, Cubulteria, Bergomum, Saguntum, and Ostippo. 9 At Anazarbus a portrait was erected between 17–23 A.D. 10 And, finally, 11 the military activities of Drusus seem reflected by the portrait set up at Athens between 20–23 A.D. or, possibly, after his death. 12

If no inscriptions recording the dedication of portraits to Caligula before his accession had survived, his youth and the comparatively short period in which he was marked for the succession before his accession, as well as the treatment accorded his memory after his death, would suffice to explain their absence. But, even so, the record of two the portraits erected before 37 A.D. survives. They were set up at Calymna in 18 (?) A.D. and at Vienna between 33–37 A.D. Since only thirteen cer-

¹ Olympia v, 221=Sylloge ³ 792, Dessau 8786. The Olympic festival of 17 a.d., when the chariot-race seems to have been permanently restored as part of the program (E. N. Gardiner, History and Remains of Olympia, p. 160), was the only one held between 14 and 19 a.d. Reference to Tiberius as Σεβαστός makes 14 a.d. the terminus post quem.

² IG. ii-iii ², 3258-3260. Kirchner bases the date on Tacitus' account (Annals ², 53) of Germanicus' visit to Athens.

³ CIL. iii, 12047 = Dessau 175, CIL. xii, 406.

⁴ IG. v, 1, 375. In this inscription the formal filiation and the reference to Germanicus as τ]ὸν ἀπὸ προγόνων εὐεργέτων seem to indicate that he was alive when the portrait was dedicated.

⁵ IGR. iv, 1549. I am not entirely convinced of the correctness of the restoration. But the name of Germanicus seems certain. If the names of Tiberius and Drusus also appeared, all three portraits were probably erected during the lifetime of Germanicus, perhaps in 18 A.D. as Lafaye suggests, when Germanicus visited Colophon (Tacitus, Annals 2, 54).

⁶ CIG. 2657 = Loewy, 356. For the date see p. 603, note 10.

⁷ CIL. xiv, 5322. This date is based on the fact that Drusus is only called *pontifex* in the inscription. He was made *quaestor* in 11 A.D. (Dio 56, 25, 4).

⁸ CIL. v, 2151 = Dessau 166, iii, 5769, ii, 3103, iii, 13565; IGR. iv, 1720, 324.

⁹ CIL. x, 4573, 4617, v, 5121, ii, 3829 = Dessau 167, ii, 5048.

¹⁰ IGR. iii, 895. Philopator II, king of Cilicia, died in 17 A.D. (PIR. iii, 35, 282). I have assumed that Helenus, the dedicator, who described himself as the freedman of the king, was manumitted testamentarily. This need not be the case. It is on the basis of this possibility that I set 17 A.D. as the terminus post quem.

[&]quot;I have not included the inscriptions that record portraits of Drusus erected, or voted (?), in 23 A.D. I believe that these portraits were set up, at least the overwhelming majority of them, because of and after his death.

¹² IG. ii—iii ², 3257. The earlier terminus of this date is based on the reference to Drusus as νέον θεὸν ''Αρη, who campaigned in Pannonia, Illyricum and Germany from 14–20 A.D.

¹³ Claudius, for example, among the first acts of his administration had all his portraits in Rome removed by night (Dio 60, 4, 5).

¹⁴ There are three portrait inscriptions of Caligula that date before his accession. But the two found at Vienna in Narbonensis are identical in language and very similar in shape and letters. They seem therefore to be tablets intended for opposite sides of the base of the same monument.

¹⁵ IGR. iv, 1022. It is possible, as Lafaye suggests, that this portrait was erected when Caligula accompanied his father Germanicus to the east (Suetonius, Caligula, 10).

¹⁶ CIL, xii, 1848, 1849 = Dessau 189.

tain portrait inscriptions of Caligula that date after his accession have survived, which, however, record fifteen portraits, the ratio between his pre- and post-accessional portraits does not differ greatly from that of Tiberius.¹ Obviously, the three inscriptions that have survived Caligula's hated memory represent only a tiny fraction of the once extant portraits set up before he became emperor.

Claudius' prospects of ever becoming emperor were, as Tacitus points out,² most unpromising. But his portraits also were to be seen in the provinces before his accession. At Ticinum his portrait was set up with the other Julio-Claudians in 7/8 A.D. on the arch already mentioned.³ The portraits set up at Pola and Alexandria Troas date from the reign of Caligula.⁴

Nero's portraits, like those of Caligula, were exposed to destruction after his death. His prominence before accession was greater, however, than Caligula's. This probably accounts for the greater number of inscriptions that record portraits set up before he came to power. In 51/52 A.D. his portrait was set up at Rome with

¹ The total number of Tiberius' extant portrait inscriptions is approximately one hundred and twenty. The appended list, which I have tried to make as complete as possible, includes one hundred and nineteen. It has already been seen that at least twenty-six record the erection of portraits before Tiberius came to power, ROME: CIL. vi, 902, 903, 904, 905, 31277, 31278, 251 = Dessau 6080. LA-TIUM: Ostia (CIL. xiv, 4339); Lavinium (CIL. xiv, 4176); Nomentum (CIL. xiv, 3943); Treba Augusta (CIL. xiv, 3448); Tusculum (CIL. xiv, 2591-2592); Praeneste (CIL. xiv, 2910b). REGIO I: Puteoli (CIL. x, 1624 = Dessau 156); Herculaneum (CIL. x, 1414). REGIO III: Grumentum (CIL. x, 207); Copia Thurii (CIL. x, 8088). REGIO IV: Aveia Vestina (CIL. ix, 3606); Ager Amiternus, Roio (CIL. ix, 4334). REGIO VII: Colonia Saturnia (CIL. xi, 2647); Falerii (CIL. xi, 3076 = Dessau 116, 3085); Veii (CIL. xi, 3786, 3790); Capena (CIL. xi, 3872 = Dessau 159); Forum Clodii (CIL. xi, 7552 [compare xi, 3303 = Dessau 154]); Centum Cellae (CIL. xi, 3517 = Dessau 145). REGIO X: Verona (CIL. v, 8845). REGIO XI: Ticinum (CIL. v, 6416, 4 = Dessau 107, 4; 6417). SICILY: Eryx Mons (CIL. x, 7257 = Dessau 939); Lilybaeum (CIL. x, 7226); Naso (Eph. Epigr. viii, 708). LUSITANIA: Emerita (Eph. Epigr. viii (Hisp). 22). BAETICA: Italica (CIL. ii, 1113); Ulia (CIL. ii, 1529); Anticaria (CIL. ii, 2037 = Dessau 155); Ilureo (CIL. ii, 2062); Adamuz (CIL. ii, 2181). TARRACONENSIS: Castulo (CIL. ii, 3268); Carthago Nova (CIL. ii, 5930 = Dessau 144); Tarraco (CIL. ii, 6080 = Eph. Epigr. ii, 325). AQUITANIA: Mediolanum Santonum (CIL. xiii, 1036). LUGDUNENSIS: Lugdunum (CIL. xiii, 1769 = Dessau 3208, 1789). BELGICA: Nasium (CIL. xiii, 4635); Mediomatrici, Herapel (CIL. xiii, 4481); Bagacum (CIL, xiii, 3570 = Dessau 8898). NARBONENSIS: Aurasio (CIL. xii, 1230). DALMATIA: Promona (CIL. iii, 14316, 4); Spalato (CIL. iii, 15131 5); Aenona (CIL. iii, 2972); Oneum (AE. 1922, 40). MACEDONIA: Mekes (SEG. 1, 286). ACHAEA: Delphi (Sylloge 3 791 A, B); Thespiae (IG. vii, 1837); Athens (IG. ii-iii², 3228, 3243-3247, 3254, 3262, 3264-3265); Eleusis (IG. ii-iii ², 3261, 3263); Chaleis (IG. xii, 9, 939); Megara (IG. vii, 195); Corinth (AE. 1922, 1); Epidaurus (IG. iv ², 1, 597, 599); Gythion (AE. 1929, 99); Olympia (Olympia v, 220, 369-371); Pholegandrus (IG. xii, 3, 1058). CRETE & CYRENAICA: Olous (IGR. i, 1011); Axus (IGR. i, 958). ASIA: Mytilene (IG. xii, 2, 205, 206); Eresus (IG. xii, 2, 536, 539); Samos (IGR. iv, 1724c = SEG. i, 390); Cyzicus (CIL. iii, 7061 = Dessau 217); Ilium (IGR. iv, 207); Pergamum (IGR. iv, 320-321); Cyme (IGR. iv, 1739; CIL. iii, 7099); Mostena (IGR. iv, 1351 = Dessau 8785); Monghla (IGR. iv, 1288); Blaundus (IGR. iv, 714); Smyrna (IGR. iv, 1391-1392 = CIL. iii, 7107); Sardis (IGR. iv, 1503); Aphrodisias (AE. 1907, 30); Sebaste (IGR. iv, 683); Halicarnassus (CIG. 2657). GALATIA: Ancyra (IGR. iii, 157); Apollonia (MAMA. iv, 143). LYCIA & PAMPHYLIA: Myra (IGR. iii, 721). CILICIA: Olba (IGR. iii, 846). CYPRUS: Salamis (CIL. iii, 12104); Palaepaphus (IGR. iii, 941-942); Lapethus (IGR. iii, 933). SYRIA: Palmyra (AE. 1933, 204). AFRICA PROCONSULARIS: Thugga (CIL. viii, 26518; AE. 1914, 172); Bulla Regia (CIL. viii, 25516); Carthago (CIL. viii, 10526/7, 12510); Chould-el-Batel (CIL. viii, 25844). NUMIDIA: Mograwa (CIL. viii, 11912 = Dessau 162).

The following inscriptions, which may possibly have been portrait inscriptions of Tiberius, seem too doubtful to be included with those listed above: CIL. vi, 906; Eph. Epigr. ix, 768; CIL. xi, 5424, 3597; AE. 1922, 120; CIL. ii, 476; xiii, 1590; xii, 1844; AE. 1901, 98; IG. ii–iii ², 3248; CIL. iii, 10849; IGR. iv, 1096, 322, 1549; iii, 943; CIL. viii, 5205, 10492.

² Annals iii, 18. ³ CIL. v, 6416, 10 = Dessau 107, 10. ⁴ CIL. v, 24 = Dessau 198, iii, 381.

those of other members of Claudius' family on the arch commemorating the more or less final victory in Britain. The other portraits cannot be more precisely dated than between 50–54 A.D. They were erected at Pompeii, Olympia, Ilium, Pergamum, and Halasarna.

In the light of the evidence that has been presented there can be no doubt, in my opinion, that in Julio-Claudian times artists of the chief provincial centers could, immediately after learning of the accession of a new emperor, turn to the portraits set up before that event for models of his features.

The evidence concerning the speed with which imperial portraits were distributed must now be considered. This evidence is again derived from portrait inscriptions. The datable portrait inscriptions should be concentrated in the first year of a new emperor's reign, if their distribution was effected with anything resembling "amazing speed." ³ They should also be found in widely separated areas. But, if the dated portrait inscriptions are not numerous, either absolutely or relatively, in the first year of an emperor's reign and tend to be concentrated in particular cities or regions, the conclusion must be that their distribution responded to no other pressure than the normal demands of the art trade at such times.

Approximately two-thirds of Tiberius' portrait inscriptions are datable.⁴ This proportion is sufficiently large to warrant confidence in the conclusions drawn from them. From 14/15 A.D. no certainly dated inscription has survived.⁵ From 15/16 A.D. two are extant from Grumentum in Regio III and Colonia Saturnia in Regio VII.⁶ From 16/17 A.D. three survive from Eresus on Lesbos, Thabraca in Africa Proconsularis, and Aenona in Dalmatia.⁷ From 18 A.D. one is extant from Forum Clodii ⁸; from 18/19 A.D. one from Lilybaeum; ⁹ from 20 A.D. one from the Mediomatrici in Belgica.¹⁰ This date seems sufficiently far removed from the date of Tiberius' accession to permit the detection of speedy distribution of his portraits immediately after that event. The record for the early years of Tiberius' reign compares unfavorably with that of the later years, when special occasions gave impulse to the erection of his portraits.¹¹ There is evidence of the erection of four portraits in 31/32 A.D., ¹² four in 32/33 A.D., ¹³ two in 33/34, ¹⁴ three in 34/35 A.D., ¹⁵ and four in 36/37 A.D.

¹ CIL. vi, 921 = Dessau 222, 4.

² CIL. x, 932=Dessau 224; Olympia v, 373; IGR. iv, 209d: it may be, as Haubold (De Rebus Iliensium, 51) suggests, that this portrait was erected after 53 A.D. when Nero acted as advocate for the people of Ilium before the senate and secured their exemption from all munera publica; IGR. iv, 330, 1097.

³ Swift, AJA. xxvii, 1923, p. 300.

⁴ About eighty of the portrait inscriptions of Tiberius can be dated.

⁵ Hiller von Gaertringen (*IG.* iv², 1 ad 599) dates the later of two portrait inscriptions found at Epidaurus (*IG.* iv², 1, 599) as ca. 14/15 A.D. This date is quite acceptable as a probability, but it rests entirely on inference, unsupported by any evidence from the stone or Tiberius' relation to Epidaurus.

⁶ CIL. x, 207; xi, 2647.

⁷ IG. xii, 2, 539; CIL. viii, 5205; CIL. iii, 2972.

⁶ CIL. xi, 7552. For the date see p. 604, note 4.

⁹ CIL. x, 7226.

¹⁰ CIL. xiii, 4481.

¹¹ I have in mind particularly the fall of Sejanus in 31 A.D. and the deaths of Drusus and Agrippina in 33 A.D., who were all presented to public opinion as conspirators against the safety of the emperor.

Rome (CIL. vi, 902); Ilium (IGR. iv, 207); Mostena (IGR. iv, 1351); Cyme (IGR. iv, 1739).
 Tusculum (CIL. xiv, 2592); Copia Thurii (CIL. x, 8088); Capena (CIL. xi, 3872); Chould-el-Batel (CIL. viii, 25844).
 Treba Augusta (CIL. xiv, 3448); Oneum (AE. 1922, 40).

¹⁵ Nomentum (CIL. xiv, 3943); Cyme (CIL. iii, 7099); Bulla Regia (CIL. viii, 25516).

¹⁶ Rome (CIL. vi, 903); Lavinium (CIL. xiv, 4176: I am not certain, however, that this fragmentary inscription recorded the dedication of a portrait); Thugga (AE. 1914, 172); Herculaneum (CIL. x, 1414).

The portrait inscriptions of Caligula are less satisfactory because of their small number. Of his fifteen portrait inscriptions that survive¹ only five can be precisely dated. Two were erected before Caligula's accession and three after it. Of the latter, two were erected in 37/38 A.D. at Tarnaiae Nantuatium and at St. Jean-de-la-Porte in Gallia Narbonensis. The other is dated April 28, 39 A.D. and was found at Syene in Egypt.

Of all the Julio-Claudian successors of Augustus, Claudius was the only emperor who was not, so to speak, an heir apparent before his accession. If any Julio-Claudian administration had reason to strive for the speedy distribution of the imperial portrait, it was the administration of Claudius. The evidence furnished by his portrait inscriptions is therefore more significant on this point than that furnished by the inscriptions of any other Julio-Claudian. The total number of his portrait inscriptions is not much less than that of Tiberius.² Of this total, fifty-nine, or fifty-seven per cent, are datable.³ This proportion is large enough to permit reliable conclusions. Claudius, it will be recalled, dated his tribunician power from January 25 to January 24. Over eleven months, almost a full year, of his first tribunician power fell therefore in 41 A.D.

Of the fifty-nine portrait inscriptions of Claudius that are datable, twenty-one, or thirty-six per cent, are to be dated between 41/43 A.D.⁴ Obviously, Claudius' accession gave a strong impulse to the erection of his portraits. But only five of these twenty-one portraits date from the first year of Claudius' reign. One was found at Thugga in Africa Proconsularis on a monument which was originally dedicated to Caligula,⁵ one at Delphi,⁶ and three at Athens.⁷ Ten inscriptions date from 42 A.D.,⁸ two from 42/43 A.D.,⁹ and four from 43 A.D.¹⁰ After 43 A.D. dedications to Claudius become fewer in any single year until the period 48/49 A.D., which coincides with the downfall of Messalina and the rise of Agrippina. From this period, which,

¹ This number requires explanation. I have counted the two inscriptions found at Vienna as one, since they belonged to the same monument, and the four portraits referred to in IG. vii, 2711 as one portrait inscription. It would be more literally accurate to say that fifteen portrait inscriptions recording seventeen portraits are extant. ITALY: Spoleto (CIL. xi, 4778). AQUITANIA: Avaricum (CIL. xiii, 1189 = Dessau 4675). NARBONENSIS: Vienna (CIL. xii, 1848, 1849 = Dessau 189); Tarnaiae Nantuatium (AE. 1897, 2); St. Jean-de-la-Porte (CIL. xii, 2331). ACHAEA: Delphi (IG. vii, 2711²²) = Dessau 8792); Athens (IG. ii-ii², 3266-3267); Isthmus (IG. vii, 2711²²); Nemea (IG. vii, 2711²²); Olympia (IG. vii, 2711³¹). CRETE & CYRENAICA: Candia (AE. 1935, 91). ASIA: Aegiale (IG. xii, 7, 437); Mytilene (IG. xii, 2, 209); Didyma (AE. 1912, 134); Calymna (IGR. iv, 1022). EGYPT: Syene (CIL. iii, 14147¹= Dessau 8899). For the fragmentary Delphian inscription restored to Caligula see p. 610, note 1. CIL. vi, 36909 is too doubtful to be included. The almost complete absence of Italian portrait inscriptions of Caligula is noteworthy.

² I have listed one hundred and four portrait inscriptions in my study (PC. pp. 14–22). To these should be added IG. ii–iii², 3276.

³ See PC. pp. 22-28.

⁴ See PC. pp. 22–23, 27.

⁶ CIL. viii, 26519 plus AE. 1914, 173.

⁶ Sylloge³ 801 A. ⁷ IG. ii-iii², 3268-3270.

⁸ Sestinum (CIL. xi, 5999); Veleia (CIL. xi, 1169); Sagalassus (CIL. iii, 6871); Burdigala (CIL. xiii, 590); Delphi (Sylloge³ 801 B); Athens (IG. ii-iii², 3271-3272); Zian (CIL. viii, 11002); Hippo Regius (AE. 1935, 32); Denderah (IGR. i, 1165 = OGI. ii, 663: this portrait was of the conventional Egyptian type and is without portrait value).

⁹ Lanuvium (CIL, xiv, 2097 = Dessau 6194); Olbasa (CIL, iii, 6889).

¹⁰ Rome (CIL. vi, 915); Mogontiacum (CIL. xiii, 6797 = Dessau 7076); Vicus Marosallensis (CIL. xiii, 4565 = Dessau 7061); Ephesus (AE. 1924, 69).

however, covers almost two years, six portrait inscriptions survive. Then once more they become less numerous.

Approximately forty portrait inscriptions of Nero are extant.² About half of them are datable. Six of these, as we have seen, were erected before his accession. Of the portraits erected after his accession only one can be shown to have been erected in the first year of his reign. It was erected, or its erection voted, between October 13 and December 31 of 54 A.D. at Delphi, which seems to have been especially eager to dedicate portraits of new emperors at the earliest possible moment after their accession.³ A portrait appears to have been set up in the early period of Nero's reign at Messene, but how early cannot be determined.⁴ A portrait was set up at Olisipo in Lusitania in 57 A.D.⁵ In the same year perhaps—the stone is badly broken—a portrait was erected at Salpensa in Baetica.⁶ In 58 A.D. a portrait was set up at Aequiculi in Regio IV.⁷ Some time in the period 54–57/58 A.D. a portrait was dedicated at Alexandria Troas.⁸ In 58/59 A.D. a portrait was erected at Olympia.⁹ In 60/61 A.D., which is as far as we need to come in search of speedy distribution, three portraits were erected in Britain, in Cyprus, and in Egypt.¹⁰

To analyze the evidence presented, it is clear that Tiberius' accession did not immediately stimulate to any appreciable extent the erection of portraits in his honor. Nor is this strange. From the evidence of the portrait inscriptions it is evident that the number of Tiberius' portraits to be seen throughout the empire when he came to power was greater than that of Claudius' portraits erected in the first three years of Claudius' reign. This fact seems to indicate that most communities of any size already possessed portraits of Tiberius in 14 A.D. 12

¹ 48/49 A.D.: Herculaneum (CIL. x, 1416); Taurini (CIL. v, 6969); Thugga (CIL. viii, 26517 = Dessau 6797). 49 A.D.: Mediolanum (CIL. v, 5804); Provenience Unknown (CIL. iii, 6060): Mediolanum Santonum (CIL. xiii, 1037).

² ROME: CIL. vi, 927, 31288, 921 = Dessau 222, 4. REGIO I: Casinum (CIL. x, 5171); Pompeii (CIL. x, 932). REGIO II: Aeclanum (CIL. ix, 1108). REGIO IV: Aequiculi (CIL. ix, 4115). REGIO VII: Luna (CIL. xi, 1331 = Dessau 233, 1332, 6955 = Dessau 8902). BAETICA: Marchena (CIL. ii, 1392); Salpensa (CIL. ii, 1281). LUSITANIA: Olisipo (CIL. ii, 183, 184); Emerita (Eph. Epigr. viii (Hisp), 24). AQUITANIA: Mediolanum Santonum (CIL. xiii, 1040). LUGDUNENSIS: Metiosedum (CIL. xiii, 3013). BRITANNIA: Regni (CIL. vii, 12 plus Eph. Epigr. ix, p. 513). NORICUM: Virunum (CIL. iii, 4825). MACEDONIA: Hripishta (AE. 1914, 216). ACHAEA: Delphi (AE. 1937, 52 = Sylloge⁸ 808); Athens (IG. ii-iii², 3277-3278); Megara (IG. vii, 68); Sparta (IG. v, 1, 376); Messene (IG. v, 1, 1449-1450); Olympia (Olympia. v, 373, 375, [374?]). BOSPORUS: Panticapaeum (IGR. i, 876). ASIA: Ilium (IGR. iv, 209d); Alexandria Troas (CIL. iii, 382); Pergamum (IGR. iv, 330); Halasarna (IGR. iv, 1097); Cos (IGR. iv, 1053); Hippia (IGR. iv, 1090); Aphrodisias (CIG. 2740); Tralles or Nysa (CIG. add 2942d); Omarbeili (AE. 1891, 151). LYCIA & PAMPHYLIA: Sagalassus (IGR. iii, 945). CYPRUS: Salamis (IGR. iii, 986); Curium (IGR. iii, 971). EGYPT: Talit (IGR. i, 1124).

³ BCH. lx, 1936, pp. 374–381. For the speed with which Delphi erected portraits of new emperors compare Dittenberger's comment (Sylloge³ 801, note 1) on the earliest of Claudius' portraits erected at Delphi. It too appears to have been erected in great haste. The use of a previously used base seems to guarantee that the date of Claudius' portrait represents the actual erection and not the date of the decree to set it up.

⁴ IG. v, 1, 1449. The basis for this belief is the fact that Cleophatus, the dedicator, was the first priest of Nero and was the first to erect a statue of him.

⁶ CIL. ii, 183. ⁶ CIL. ii, 1281. ⁷ CIL. ix, 4115. ⁸ CIL. iii, 382. ⁹ Olympia v, 375.

¹⁰ CIL. vii, 12 = Eph. Epigr. ix, p. 513; IGR. iii, 986; IGR. i, 1124.

¹¹ The inscriptions of Tiberius recording portraits set up before his accession amount to twenty-six, perhaps as many as thirty-one (see above page 603, while the number of inscriptions of Claudius recording portraits erected between 41/43 A.D. number twenty-one (PC. p. 27).

¹² Some cities erected many portraits of him throughout his long life. From Rome seven portrait in-

Caligula's portrait inscriptions are perhaps too few to afford reliable conclusions. But the fact that two of the three precisely datable post-accessional inscriptions date from 37/38 A.D.¹ seems to confirm the *a priori* probability that production of his portraits was greatly increased at the outset of his reign.²

The portrait inscriptions of Claudius reflect the strong impulse his accession gave to the plastic reproduction of his features, as I have noted elsewhere. Over forty-six per cent of his recorded portraits date from the first three years of his reign.

Nero's inscriptions, however, fail to show that his accession greatly stimulated the dedication of his portraits. This apparent fact may be the result of chance. But I doubt it. Six portrait inscriptions that date from the period before his accession are extant. This number, though it may seem small when compared with Tiberius' total, is clear indication, when the destruction that overtook his monuments is taken into account, that his features were considerably publicized before he came to power.

It thus becomes apparent that if evidence of speedy distribution is to be found it must be sought from the inscriptions of Caligula and Claudius. Two of Caligula's inscriptions and five of Claudius' date from the first year of their reign. But for various reasons they cannot be accepted as evidence of speedy distribution from Rome.

Three of Claudius' portraits were erected at Athens, the center of the artistic production of Achaea.⁶ Here, certainly, there must have been a portrait of him set up before his accession. No inscription, to be sure, recording such a portrait is extant. But neither have such inscriptions survived at Rome for any Julio-Claudian emperor after Augustus except Nero. The portrait set up at Alexandria Troas between 37/41 A.D.⁷ proves, however, that pre-accessional portraits of Claudius had found their way to the Aegean regions before his accession.

Delphi is the other Greek city which erected a portrait of Claudius in the first year of his reign.⁸ It was the site also of the only first-year portrait of Nero recorded

scriptions survive (CIL. vi, 902–905, 31277–31278, 251 = Dessau 6080); from Tusculum two (CIL. xiv, 2591–2592); from Veii two (CIL. xi, 3786, 3790); from Ticinum two (CIL. v, 6416, 4 = Dessau 107, 4; 6417); from Delphi two (Sylloge* 791 A, B); from Eleusis two (IG. ii-iii², 3261, 3263); from Athens ten (IG. ii-iii², 3228, 3243–3247, 3254, 3262, 3264–3265); from Epidaurus two (IG. iv², 1, 597, 599); from Olympia four (Olympia v, 220, 369–371); from Smyrna two (IGR. iv, 1391–1392); from Lesbos four: two from Mytilene (IG. xii, 2, 205–206), and two from Eresus (IG. xii, 2, 536, 539); from Cyme two (IGR. iv, 1739; CIL. iii, 7099); from Pergamum two (IGR. iv, 320–321); from Palaepaphus two (IGR. iii, 941–942); and from Thugga two (CIL. viii, 26518; AE. 1914, 172).

¹ AE. 1897, 2; CIL. xii, 2331. Pomtow restores a fragment found at Delphi (CIG. 1696: Klio 17, 1921, pp. 166, 152 = SEG. i, 156) to Caligula. The only link to him, however, is the name of the epimelete, Callistratus, who, as Pomtow points out, served under Claudius as well as Caligula. But, even if the attribution can be accepted with assurance, and in my opinion it cannot, the date of the erection

of the portrait still remains problematical.

² Bernoulli's statement (*Röm. Ikonographie* ii, 1, p. 303): "Caligula selbst liess seine Bildnisse massenhaft durch die Provinzen versenden, bis in den Tempel von Jerusalem" will not bear examination (Josephus, *Antiquities* 18, 8, 2). The statement that Caligula substituted his own features for the heads of famous statues of Greece, among them the Olympian Zeus, which he tried to bring to Rome, occurs among the examples that Suetonius (*Caligula* 22, 2; compare Dio 59, 28, 3–5) cites of his wildest extravagances. Compare Nock in *CAH*. x, pp. 496–497.

³ *PC*. pp. 27, 40–41.

⁴ *PC*. p. 40.

⁵ Under Otho statues of his that had been removed were set up again (Plutarch, Otho 3, 1; Tacitus, Histories i, 78). But this probably held chiefly for Rome.

⁶ See below page 612, 6.

⁷ CIL. iii, 381. ⁸ Sylloge⁸ 801 A.

by his inscriptions. As has already been pointed out, Delphi was particularly eager to erect the portrait of a new emperor at the earliest moment possible. The source of these portraits was certainly Athens, whether it be assumed that they were imported ready-made or that Athenian artists made them at Delphi.

One of the two portrait inscriptions of Caligula still extant that date from the first year of his reign comes from Tarnaiae Nantuatium. This town, the capital of the Poenine valley,³ is situated on the upper Rhone. Along the valley of this river a portrait could easily reach it from Lugdunum or Vienna, where, as two extant portrait inscriptions prove,⁴ a portrait of Caligula erected before his accession was available as a model. The other first-year portrait inscription was found in Gallia Narbonensis at St. Jean-de-la-Porte, which is situated on the Isère above Grenoble. It is even closer to Vienna and Lugdunum than Tarnaiae.

The portrait inscription of Claudius at Thugga⁵ is not in the same category as those just considered. It was cut on an arch over the name of Caligula. The arch was apparently completed only a short time before the news of Caligula's murder reached Thugga.⁶ Claudius' name was substituted with such haste that the praenomen *Imperator*, which he did not use, appears at the head of his title.⁷ Since, then, the inscription was cut so soon after Claudius' accession that the proper form of his title was not yet known, it is clear that the portrait of Claudius had not yet reached Thugga. The date of this inscription is not therefore the date of the actual erection of the portrait of Claudius on the arch. The chief anxiety of Perpetuus, the dedicator, was, no doubt, to remove the hated name of the murdered emperor.

To summarize the evidence that shows that the imperial portrait was not distributed speedily from Rome on the accession of a new emperor, no portrait inscription of Tiberius that dates from the first year of his reign is extant. The first-year portraits of Caligula, Claudius, and Nero are limited to cities which either were themselves provincial art centers with pre-accessional portraits available as models or else were near such centers. Finally, it should be remembered that, although I have accepted the date of the inscriptions under discussion as that of the actual erection of the portrait, their date can just as easily be that on which the erection of the portrait was voted.

It remains to examine the evidence that bears on the distribution of imperial portraits through the art trade. The chief sources of the evidence on this question are imperial letters authorizing the erection of portraits of the emperor, portrait inscriptions, and the extant portraits.

Imperial letters authorizing honors voted to the emperor by provincial communities at the beginning of his reign furnish a negative sort of evidence. The well known letters of Tiberius to the people of Gythion, of Caligula to the league of Achaeans, Boeotians, Locrians, Phocians, and Euboeans, and of Claudius to the people of

¹ AE. 1937, 52 = Sylloge³ 808.
² See above page 609, note 3.
³ Zeiss, RE. ii, 4, 2326–2327.

⁶ CIL. xii, 1848, 1849 = Dessau 189.
⁶ CIL. viii, 26519 plus AE. 1914, 173.

⁶ AE. 1914, 173 = Nouvelles Archives des Missions n.s. fasc. viii, 1913, 46.

^{*} AE. 1929, 99. Compare Suctonius (Tiberius 26, 1): . . . prohibuit, etiam statuas atque imagines nisi permittente se poni; permisitque ea sola condicione ne inter simulaera deorum sed inter ornamenta aedium ponerentur.

⁹ IG. vii, 2711 = Dessau 8792.

Alexandria ¹ show that the Julio-Claudian emperors tried to discourage the enthusiasm of the provincials for erecting their portraits and that, in consequence, the provincials felt to some extent, at least, the need of imperial authorization for the portraits that they wished to erect at public expense. It therefore seems unlikely that any governmental bureau existed in Julio-Claudian times whose duty it was to distribute plastic portraits of a new emperor as speedily and widely as possible.² In the absence of such a governmental bureau it follows that the distribution of imperial portraits was in the hands of art dealers interested only in their own profit which, no doubt, was best served by stimulating as large a demand for imperial portraits as possible and by meeting it as quickly as possible.

The center of the trade in imperial portraits was, of course, Rome. In Greece, Athens was the chief center of their production. The clearest evidence of this is the group of Julio-Claudian and Flavian portraits found at Olympia which bears the signatures of Athenian artists. The fact that the portraits themselves and not their bases bear the artists' signatures seems to indicate that the portraits were made in Athens and then shipped to Olympia to be set up by local workmen. The Pentelic marble of the portraits makes it unlikely that the Athenian artists came to Olympia to make them there. An Attic artist whose portrait of Claudius was set up at Athens was Euboulides of Peiraeus. 5 Aphrodisias in Caria was another eastern center of sculptural activity in the time of the empire. At Pergamum also there was probably much production of portraiture, but the only direct evidence I can find is the signature of Glycon on the base of a portrait of Germanicus found there. 7 But this is hardly conclusive. The same may be said for Halicarnassus, where the signature of Archidamos the son of Nicomachos was found on the base of the portraits of Tiberius and Drusus.⁸ At Alexandria, the second city of the empire, from which Vitrasius Pollio, prefect of Egypt, brought Claudius some porphyry portraits of the imperial family, and where so many portraits of Claudius were erected at public expense, 10 there undoubtedly was considerable production of portraits.

For the western portions of the empire the evidence is less clear. Signed portraits are rare in these parts ¹¹ and the extant portrait inscriptions are not sufficiently concentrated in Spain or Gaul to warrant the selection of any particular city as the art center of those regions. ¹² The survival in Mediolanum Santonum and Vienna of in-

¹ London Papyrus 1912, 28-51 (H. I. Bell, Jews and Christians in Egypt, 1924; A. S. Hunt and C. C. Edgar, Select Papyri ii, 212.

² The interest in the new emperor's features of the officials in charge of the mints and the manufacture of imperial *imagines* for military standards presents a different problem. Compare p. 602, note 5.

³ Treu, Olympia iii, pp. 244–248, 252–258; Loewy, 331–335; Lippold, Kopien und Ümbildungen, p. 210. ⁴ Compare Lippold, op. cit., pp. 62, 68. ⁵ IG. ii–iii², 3274; Loewy, 324.

⁶ Loewy, 364-373; Lippold, op. cit., pp. 103-107. For a preliminary report of the recent rich discovery of sculpture at Aphrodisias dating from the early years of Tiberius' reign found by the Italian Archaeological Mission in Anatolia see *ILN*. 191, 1937, pp. 1095-1097; *Palladio* ii, 1938, p. 68; *AA*. 53, 1938, pp. 744-752.

⁷ IGR. iv, 326 and compare Lippold, op. cit., p. 108.

⁸ CIG. 2657 = Loewy, 356. See p. 603, note 10 on the possibility that Archidamos was from Miletus.
⁹ Delbrück, Antike Porphyrwerke, p. 17 and compare PC. pp. 2-3.
¹⁰ London Papyrus 1912, 28-51.

¹¹ A statue of Mithras signed by an otherwise unknown Demetrius which dates from the second half of the second century A.D. has been found at Emerita in Lusitania (Ferri, Scritti in onore di B. Nogara pp. 173-177).

¹² Ferri (BdA. xxxi, 1937/1938, pp. 1-8) sees evidence of a Spanish sculptural center at Emerita in

scriptions recording the successive erection of Julio-Claudian portraits 1 may point to them as Gallic centers of the production of portraits, but this seems far from certain.

There is some evidence, moreover, that points to direct dependence on Rome: namely, the series of imperial portraits, made of Italian marble, found about Martres and Toulouse and the three headless Emeritan statues just mentioned on p. 612, note 11.3 The latter are also of Luna marble.4 One is a statue of a general wearing a paludamentum which bears on its plinth the inscription Agrippa.⁵ The other two Spanish statues, both togate, are inscribed on the right and left thigh respectively ex oficina Gai Auli and ex oficina G. Auli fi. The head of the statue of Agrippa there is not the slightest reason for doubting the authenticity of the inscription⁸ was made of one piece with the body, but the arms were made separately. The heads and arms of the togate statues were made separately. 10 All these facts: the marble; the inscription Agrippa—for the guidance, perhaps, of local workmen in setting up the shipment; the trade mark of the studio; the Greek idiom of the trade mark; the early date of the Agrippa statue at least,11 which Ferri admits came from the same studio as the togate statues; and the fact that the heads (except that of the Agrippa statue) and the arms were worked separately point to an Italian rather than a Spanish provenience for this group.

That smaller communities did not have the facilities to produce imperial portraits locally is proved by the portrait inscription of Claudius from Vicus Marosallensis in Belgica. This inscription, unique among the portrait inscriptions of Augustus' Julio-Claudian successors, records both the date on which the portrait was voted and that on which it was dedicated.12 The number of the tribunician power and the

several inscribed statues. In my opinion these statues point rather to the absence of an Emeritan center, as I shall try to show below.

¹ Mediolanum Santonum: Tiberius, Germanicus, and Drusus (CIL. xiii, 1036); Claudius (CIL. xiii, 1037-1038); Nero (?) (CIL. xiii, 1040). Vienna: Augustus and Tiberius (?) (CIL. xii, 1844); Germanicus

(CIL. xii, 1846); Drusus (CIL. xii, 1847); Caligula (CIL. xii, 1848, 1849 = Dessau 189).

² Espérandieu (Bas-Reliefs de la Gaule Romaine ii p. 29), after carefully investigating with the help of Parisian marble workers the numerous portrait busts and heads found in the environs of Martres and Toulouse, came to the considered conclusion that Roschach and Joulin, as opposed to Lebègue, correctly described the marble as "Italian," more precisely marble of Luna. The workmanship rules out the possibility that the portraits were made of Italian marble by local artists in Gaul. An unfinished marble portrait of a woman found at Cologne in 1924 shows, however, that at a later period-the head seems to date from the second century A.D.-portraits were made locally from imported marble (Fremersdorf, Die Denkmäler des römischen Köln 13, pl. 148; Espérandieu, op. cit., x, 7431). I owe this reference to Professor K. Lehmann-Hartleben, to whom I wish here to express my deepest thanks for the valuable criticism he gave this article while it was in manuscript.

³ Ferri (loc. cit.) gives their complete bibliography. . ⁴ Ferri, BdA. xxxi, 1937/38, p. 8, note 2. ⁵ Ferri (op. cit., p. 4), who does not seem to be entirely familiar with epigraphical apparatus, (cf. note 4, which should read Eph. Epigr. viii, 364), follows Mélida (Catálogo Monumental, Provincia de Badajoz i, 293, 1037) in the incorrect reading M. Agrippa (cf. Hübner, Eph. Epigr. viii (Hisp), 19).

This is also garbled by Ferri (op. cit. p. 1; cf. Hubner, op. cit., 21).

⁷ This inscription is apparently listed in neither the CIL., Eph. Epigr., or L'Année Épigraphique. A facsimile is given by J. M. de Navascués y de Juan in Museo Arqueológico Nacional, Adquisiciones en ⁸ Ferri, op. cit., pp. 6, 8. 1930, no. 5, p. 5, fig. 1.

Oómez-Moreno y Pijoán, Materiales de Arquelogia i, p. 87, fig. 42; Mélida, op. cit., pl. 95; Ferri, op. cit., p. 4, fig. 6.

10 Mélida, op. cit., pl. 96; Ferri, op. cit., fig. 6; Navascués y de Juan, op. cit., pl. 1; Ferri, op. cit., fig. 2.

11 Ferri dates these portraits in the 2nd century A.D.

¹² CIL. xiii, 4565 = Dessau 7061; see p. 601, note 7, for its text.

imperatorial salutations show that the portrait was voted as Claudius passed through the region on his way to Britain, since not even the 4th and 5th imperatorial salutations, which followed A. Plautius' first successes in Britain before the arrival of Claudius on the island,¹ appear on the stone. The second date proves, however, that the statue was not actually dedicated until the following year, 44 A.D.,² on September 23, the anniversary of Augustus' birthday.³ The choice of this date was most probably deliberate. But the delay of approximately a year and a half between the voting and the dedication of the portrait seems too long to be accounted for by supposing that the Marosallenses were unwilling to dedicate their portrait on any day but the anniversary of the birth of Augustus. Clearly, they had to wait until a portrait could be imported either from the larger cities of Gaul or from Italy, most probably the former.

The most compelling evidence, however, of commercial traffic in imperial portraits is that furnished by the extant imperial portraits. Since only part of Brendel's study of the portraits of Augustus ⁴ has been published and since the only recent study of the portraiture of a Julio-Claudian emperor is limited to the youthful portraits of Tiberius, ⁵ I shall confine myself to the portraits of Claudius.

Of the thirty-eight certain or possible portraits of Claudius which I have accepted in my study of his portraiture, fourteen are sufficiently well preserved to show whether their heads were made of one piece with the statue or separately. Fortunately, the provenience of all but one of these portraits is known, so that it becomes possible to come to some conclusion as to whether there is any relation between separately made heads and the distance at which they are found from art centers. Portrait statues, the head of which was made of one piece with the rest of the statue, were found at Lanuvium, Privernum, Gabii, Olympia, and Leptis Magna.⁶ The head of the small cuirass bust found at Piraeus is also of one piece with the bust.⁷ The nude bronze statue from Herculaneum is, of course, without value in regard to this point.⁸ The portraits which were made separately to be let into statues are the heads found at Veleia,⁹ Aquileia, Priene, Piraeus, Sparta, Samos, and that of unknown provenience in the Ny Carlsberg Glyptotek.¹⁰

Gaheis, RE. iii, 2796. Liebenam, Fasti Consulares 12. Fitzler-Seeck, RE. x, 277.

⁴ The published portion of his *Ikonographie des Kaisers Augustus* discusses only an approximate sixth of the extant portraits, those which precede the Prima Porta portrait chronologically.

⁵ L. Curtius, "Ikonographische Beiträge," RM. 50, 1935, pp. 286-320.

⁶ Vatican, Rotonda 550; Vatican, Braccio Nuovo 18; Louvre 1231; Olympia 143; Tripoli, Castello. I have not included the well known seated statue from Caere, which is in the Lateran (352), because I am not entirely convinced that the head belongs to the torso (cf. PC. p. 43, note 222).

⁷ PC. no. 30. I have not included the lost bust that was found at Bovillae, the base of which was in the Prado before the recent hostilities in Spain (R. Ricard, Marbres Antiques du Musée du Prado à Madrid 88, 123; PC. no. 17), though Bartoli's drawing of it (Admiranda 80) and published descriptions seem to indicate that the head was made of one piece with the bust.

⁸ Naples, Museo Nazionale 5593. See, however, Kluge (*Die Antiken Gross-Bronzen* ii, p. 16, pl. 4) on the practice of setting bronze portrait heads cast to order into ready-made bronze toga-statues. I am indebted to Professor K, Lehmann-Hartleben for this reference.

⁹ Parma, Museo civico, Sala delle Statue Romane. I have tried to show that this head was reworked from a portrait of Augustus into one of Claudius (*PC*. pp. 44–45).

¹⁰ Aquileia, Museo Archeologico, Sala II, 55; British Museum 1155; Piraeus, Museum; Sparta, Museum; Samos, Excavations of the German Archaeological Institute; Ny Carlsberg Glyptotek 649 (PC. nos. 14, 15, 23, 29, 32, 33, 27).

The geographical distribution of these portraits reveals at once that statue portraits of which the heads are of one piece with the statues are found in cities close to Rome or Athens, while the separately made heads are found in cities farther removed from these centers. The statues at Olympia and Leptis Magna are only apparent exceptions to this formulation. Both are near the sea. Large statues could thus more easily reach them than the closer (to Athens) but much more inaccessible Sparta. By this I do not mean to imply that monolithic and bronze statue portraits were not also shipped to remoter communities. Undoubtedly they were. It was possible also for sculptors to make the portrait at the town or city at which the portrait was to be dedicated. But it seems clear, nevertheless, that remoter communities found it more convenient to import their portraits in sections. This practice probably gave greater protection to the more vulnerable parts while they were in transit. In some instances only the head may have been imported to be set into a statue of local workmanship. For some communities were, no doubt, as willing to economize in the erection of imperial portraits as the unfortunate at Rome who exposed himself to the charge of maiestas for transforming a portrait of Augustus into one of Tiberius by a substitution of heads.2

The Piraeus head, which also seems to conflict with the proposed formulation, offers perhaps the clearest evidence for the existence of a considerable traffic in portrait heads ready-made for letting into local statues. This salt-eaten portrait, which is only roughly finished behind with rasp marks still plainly visible upon it, was fished up from Piraeus harbor in 1930 along with numerous neo-Attic reliefs which are made of non-Greek marble.³ The marble of the head itself is not specified, nor did I in my own examination of it have the opportunity to establish its provenience. But its provenience is unimportant. For, although there are other acceptable explanations for the presence of the head in the harbor waters, the possibility remains that the head was lost overboard in the act of being loaded or unloaded at Piraeus, or that the ship on which it was loaded sank at its quay. The type of this head, it should be added, is perhaps the most popular and effective of Claudius' extant portraits.⁴

The portrait statue of Claudius found at Olympia is unique among imperial portraits. It is a replica of an original at Rome of which the portrait found at Lanuvium is another replica.⁵ In these two portrait statues, which were set up at about the same time,⁶ we have clear proof of the dependence of even Athens upon Rome for new portrait types. And yet the differences between these two statues, which have often been commented upon,⁷ are too great to permit the belief that

¹ Compare the fine head of Livia which was forced into a velate statue of local workmanship in the villa dei Misteri at Pompeii (A. Maiuri, *La Villa dei Misteri*, pp. 223–234, figs. 93–98). I am indebted to Professor K. Lehmann-Hartleben for calling my attention to this portrait.

² Annals i, 74. Blegen, AJA. xxxv, 1931, p. 91.

⁴ The head is of the same type as the famous Brunswick head (Bernoulli, op. cit. ii, 1, 340, 32 pl. 18; PC. no. 24) and head no. 650 in the Ny Carlsberg Glyptotek (Billedtavler 53, 650; PC. no. 28).

⁵ The head found at Samos is perhaps another replica of the same original (cf. PC. p. 48).

⁶ For the date of the portrait found at Lanuvium see my discussion in PC. (pp. 46-49). Graindor (Athènes de Tibère à Trajan, pp. 182-184) dates the portrait at Olympia about 43 A.D. which, in my opinion, is approximately correct. For my discussion of Rodenwaldt's view (Gnomon ii, 1926 p. 342) that the Olympian portrait is to be dated about 50 A.D. see PC. p. 49, note 256.

⁷ Pfuhl, RE. vii, 2620–2621, s.v. Hegias; Lippold, Kopien und Umbildungen, p. 187; Rodenwaldt, Gnomon ii, 1926, pp. 341–342; Graindor, op. cit., pp. 182–184.

Philathenaios and Hegias closely copied an official model from Rome. Since the portrait at Olympia is to be dated most probably about 43 A.D., there was ample time for the arrival at Athens, where at least five portraits of Claudius were erected in 41-42 A.D., of another replica from Rome of what must have been a famous portrait of Claudius. I have suggested elsewhere that its original may have been the marble portrait voted Claudius by the Roman senate at the time of his accession.3 Philathenaios and Hegias would thus have had a model at Athens for their Olympian portrait. It is possible also that the chief characteristics of this type were communicated by letter or sketches, or both, or even a small plastic model 4 by dealers in Rome to their agents in Athens. It is particularly unfortunate therefore that the features of the portrait at Olympia are too badly damaged to permit a close comparison with the features of the better preserved portrait from Lanuvium. In their present condition their resemblance in facial detail is slight. Both are recognizably Claudius, but that is all. Yet it is precisely exact correspondence in facial details that one would expect, if Philathenaios and Hegias had copied an official imago of clay or wax. The absence of such exact correspondence seems to point to the use of some other kind of model with which the Athenian artists felt free to take liberties.

In the preceding discussion I have limited myself to the effort of proving that in the Julio-Claudian period imperial portraits were distributed without governmental intervention through the ordinary channels of the art trade. Before concluding it should be pointed out, however, that there are two serious objections of a technical nature to the theory of official models made of clay or wax. The first is that, if by "clay" is meant terracotta, it is strange that no such *imagines* or their moulds be have been found. The second is that wax or clay, if wet clay is meant by "clay," are not suitable materials in the warm climate of the southern Mediterranean for objects that must be transported over long distances, whether one assumes that they were shipped overland or by sea.

In conclusion, although the evidence that I have presented is limited to the Julio-Claudian period, I believe that the distribution of the imperial portraits of succeeding dynasties throughout the first and second centuries A.D. was left, as in the Julio-Claudian period, in the hands of the art trade. With a brief interruption at the death of Nero 6 it was as possible in the latter part of the first and almost all of

⁴ These, if such were used, would have served as models of the statuary type of the portrait rather than for iconographic details which were better derived from local portraits.

⁵ AJA. xxvii, 1923, p. 301.

¹Philathenaios and Hegias have substituted for the oak wreath of the Lanuvian portrait one of laurel, and for the heavy, stiff folds of the drapery a soft clinging treatment that suggests, as Pfuhl points out (*loc. cit.*), the drapery of the figures of the Nike balustrade. They have lifted up the head to suggest an upward gaze and have classicized the pose along Polyclitan lines. In size the Olympian portrait is a good half meter smaller (2.10; including the .08 m. plinth) than the Lanuvian (2.65, including the .11 m. plinth).

² See above p. 615, note 6.

³ PC. p. 50.

⁶ Swift (AJA. xxvii, 1923, p. 299) believes that the references made by Tacitus in Histories iii, 7, 12-13 and by Suetonius in Vitellius 9 to the portraits of Galba and Vitellius furnish evidence of speedy distribution. The first passage (Histories iii, 7: desiderata diu res interpretatione gloriaque [in] maius accipitur, postquam Galbae imagines discordia temporum subversas in omnibus municipiis recoli iussit Antonius, decorum pro causa ratus, si placere Galbae principatus et partes revivescere crederentur) is a splendid example of Tacitus' insight into the motives of those long dead. But it is far from being

the second centuries A.D. as it was in Julio-Claudian times for heirs apparent to be designated and their portraits disseminated throughout the empire before their accession. Only with the anarchy of the third century did political and economic conditions make necessary the use of official *imagines* in the distribution of imperial portraits. It is significant that the earliest literary evidence of this practice comes from precisely this period.¹

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evidence that plastic portraits of Galba had been set up "in all the municipalities," a phrase which, even if taken literally, would have a strong limiting effect because it excludes other types of communities (cf. Kornemann, RE. xvi, 570–638). The fact that Antonius was in no position at the time to enforce his order heightens the rhetorical cast of the sentence. An examination of Tacitus' use of the words imago shows that it is regularly contrasted with statua or simulacrum and denotes a small portrait (Gerber-Greef, Lexicon Taciteum 563–564). The same distinction is made in an inscription found at Lugdunum (CIL. xiii, 1769 = Dessau 3208): Mercurio Augusto et Maiae Augustae sacrum ex voto. Herennius M. l. Albanus aedem et signa duo cum imagine Ti. Augusti d.s.p. solo publico fecit. In some Tacitean passages the portraits denoted by imago seem to be painted ones, in others busts. Compare the discussion of K. Scott (TAPA. 62, 1931, pp. 105–106) of these words.

The passages in which reference is made to Vitellius' portraits are obviously the small metal portraits which were affixed to the military standards (cf. Gerber-Greef).

Suetonius' mention, among the inevitable portents, of the erection of equestrian portraits of Vitellius in Gaul does not afford proof either of the speedy distribution of portraits from Rome. These portraits were set up, after all, in the region of which Vitellius was the governor (PIR. iii, pp. 449, 499). And, even if it is insisted that no provincial had had occasion to dedicate a portrait of Vitellius before he was proclaimed emperor by the troops, it should not be overlooked that Vitellius himself was available as model for both painted and plastic likeness of his features. The earliest denarii of Vitellius struck in the mint at Rome show, indeed, not the features of Vitellius but those of Otho slightly altered (Naville 2, 1922, 422; H. Stein Collection, New York). This fact seems to prove that even the distribution of the official likeness of the emperor to mint masters, whatever its form or however effected, lagged considerably behind the first report of the accession of a new emperor (cf. the remarks of Poole, which Mr. S. Mc. Mosser kindly called to my attention, on the portraits on Alexandrian issues of the early months of new administrations (BMC., Alexandria, pp. xxxvi-xxxvii; see also Vogt, Die Alexandrinischen Münzen p. 5)).

Finally, the extant portraits of these short-lived emperors are so few, even after all allowances are made for their deliberate destruction, that it is hard to believe that many plastic portraits in durable materials were ever set up (cf. Bernoulli, op. cit. ii, 2, pp. 1-20.)

1 AJA. xxvii, 1923, pp. 297-298.

Note. — Since this was written Montini (Il Ritratto di Augusto, pp. 27-30) and Wegner (Die Herrscherbildnisse in antoninischer Zeit, pp. 11-13), have briefly discussed the problem. Both believe that most provincial portraits were either shipped out from Rome or else were copied from such portraits. Graindor (Bustes et Statue-Portraits d'Égypte Romaine, pp. 19, 29, 34), arguing from practices of the late empire and Byzantine times, holds that many imperial portraits found in Egypt were made from official models.

PROMETHEUS FIRE-LIGHTER

PLATES X-XV

I

Two years ago, with the generous assistance of the National Art Collections Fund, the Ashmolean Museum acquired an Attic calyx-krater of about 425 to 420 B.C. (fig. 1 and pls. X-XIII), by the painter of the Berlin Dinos, or as he may be called for short the Dinos painter. It has been figured in the *Times* for August 13, 1937, in the *Illustrated London News* for August 21st of that year, and in the Reports of the Fund and the Museum. Since then a few additional fragments have been acquired and inserted. The height is 39.5 centimetres, the diameter 40.7. The type of decoration is that lately examined by Jacobsthal : the vase is divided horizontally into two picture-zones, the upper running right round the vase, the lower interrupted by the handles. Calyx-kraters so decorated run from the middle of the fifth century to near the end, and a list is given by Jacobsthal: they are seldom of high quality, and the Oxford vase is among the slighter works of an excellent painter.

All three subjects are taken from Attic stories. Above, the deeds of Theseus; below, on the obverse, Prometheus and satyrs, on the reverse Eos pursuing Kephalos. Six of Theseus' adventures are depicted, but not in order of time. The frontview of the vase (fig. 1) shows two scenes, each of three figures: Theseus and Procrustes, with Poseidon watching; Theseus and Skiron, with Athena watching (pl. X). The right-hand side-view two more scenes, each of two figures only: Theseus and Sinis; Theseus lifting the Rock, and a man looking on (pl. XI). The back, two more, both contests with animals—Theseus and the Bull, Theseus and the Sow (pl. XII)—but these are so arranged that the contest with the Bull is in the middle of the reverse, while part of the contest with the Sow is above the left handle, and the onlooker in the rock-scene reaches well over on to the back of the vase. White, now faded, is used for the water splashing over the side of Skiron's basin, the rope of the bull against the black background, the hair of Phaia in the contest with the Sow, the wreaths, and the inscriptions, which read $\GammaO\Sigma EI\Delta \omega N$, $\ThetaH\Sigma EV[\Sigma]$, $\GammaPOKPOV\Sigma TH\Sigma$; $A[\ThetaHNAIA]$, $\ThetaH\Sigma[EV\Sigma]$, $[\Sigma KIP]\omega N$; $\ThetaH\Sigma EV\Sigma$, $\Gamma[ITVOKAM]\Gamma TH\Sigma$.

There are many other representations of all these adventures,⁴ except the Rock, which is much less common than the others: it appears on a lekythos by the Sabouroff painter in Stockholm,⁵ and nearer our period on a cup in Ferrara (T. 128), and a skyphos, also there (T. 971). The rock was at Troezen, and the man watching this scene on the Oxford vase ought to be Pittheus—

Pitthée, estimé sage entre tous les humains.6

The lower picture on the back of the vase is of no great moment: Eos pursues

¹ A list of his works given in AV. pp. 447-9.

² Report of the N.A.C. for 1937, p. 35; Ashmolean Museum, Report for 1937, pl. 1. The museum number is 1937, 983.

³ MMS. 5, pp. 119-21 and 136-40.

⁴ Buschor in FR. iii, pp. 117-22; Radermacher, Mythos und Sage, pp. 217-50.

⁵ Nationalmusei Arbok 4, pp. 127 middle and 129-30.

⁶ From Plutarch, Theseus, 3, 2.

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Kephalos, and Kephalos' companion, as he flees, threatens the goddess with a stone (pl. XI). We turn to the remaining picture (pl. XIII). It consists of four figures —a bearded man and three satyrs. The man is stopping, or standing still. His hair, worn long over the nape, is confined by a broad band, a strophion. He wears a garment reaching to mid-shank, belted, pulled down over the belt at both hips, fastened on the right shoulder and leaving the left shoulder and breast bare. It is Prometheus: five letters of the name remain, $\Gamma POM[H]\Theta[EV\Sigma]$ and traces of a sixth, the eta. He



Fig. 1.-Calyx-Krater in Oxford, 1937.983

holds in both hands a long thickish wand-like object with flame issuing at the top. It is different from the things the satyrs hold, which are ordinary torches, such as you see hundreds of times on vases and reliefs, made of pine-shoots tied together: it has neither the vertical brown lines of the torches, indicating the several shoots, nor the pairs of transverse black lines indicating the ties; and it has a cup-like head. This must be the narthex, the stalk of giant fennel in which, according to the story, Prometheus brought fire from heaven to men.

The satyrs have lighted their torches at the flame of the narthex, and are dancing in their excitement. The four flames, painted in white, have faded, but are plain enough in the original, and two of them can be made out in the photograph. I say flame, but it is really mingled flame and smoke — αἰόλη πυρὸς κάσις.

The satyr's names are ΣΙΚ[I]NNIΣ—in front of Prometheus; ΚωΜΟΣ, behind Sikinnis; and ΣΙΜΟΣ, behind Prometheus. It is hardly fair to ask in what order they have lighted their torches, but Komos seems to have just lighted his, and Sikinnis may have been before him. Komos and Simos are common satyr-names. Sikinnis is new, but a similar name, Sikinnos, was already known from three other vases; on a fourth three letters are missing, and the name may have been either Sikinnos or Sikinnis.¹ The sikinnis was the typical dance of the satyr-play, and a kind of dancing often represented on vases is almost certainly the sikinnis.² Our satyrs, carrying torches, cannot be expected to make the typical movements of arms and hands, but the way both Sikinnis and Simos bend their knees and turn their toes out is reminiscent of the sikinnis, although there the sole of the free foot is normally shown flat on the ground.³

To return to the figure of Prometheus, the mildness of his appearance is partly due to his attitude, partly to the contrast between his smooth hair and the mops of the satyrs; in the Theseus picture also, the hair of gods as well as mortals is more or less ruffled. The dress of Prometheus needs a word of comment. The material is evidently the same as in the himatia, chlamydes, peploi, of the other pictures — wool; and not linen, as in the chiton of Athena. The garment is open down the right side; and is indeed just such a rectangle of stuff as draped differently would form a himation, only smaller. I do not know any other example of just this wear. The name of $\xi \omega \mu i \xi \omega \mu i$

Let us now look at another Attic calyx-krater, of the same period, and not far off in style, for the artist may be counted an imitator of the Dinos painter.

It has been published before, and is indeed an old find, for it belonged to Sir William Hamilton, and was figured by Tischbein: from the Hope and Waterkeyn collections it passed to Messrs. Feuardent of Paris, who kindly allowed my wife to take the photographs here reproduced (fig. 2). The surface has suffered, but there is no restoration.

The picture on the reverse, three youths, roughly done (fig. 3), has no connection with the obverse, but is worth figuring here for comparison with reverses by the Dinos painter, and with the fragment from the Agora of Athens, P 8448, part of a krater, which I publish by courtesy of Dr. Shear (fig. 4). The picture on the front of the Feuardent vase consists of four figures, set on uneven ground. In the middle is one who recalls the Oxford Prometheus. There are differences: the robe reaches to the ankles, covers both shoulders, and is ornamented in its upper part; ⁷ the belt is

¹ Charlotte Fränkel, Satur-und Bakchennamen, pp. 36, 69, and 108. ² Buschor in FR, iii, pp. 141-2.

³ The right hip of Sikinnis, his left knee, and parts of both thighs are restored, but the attitude of

⁴ Pollux 7, 47 ἡ δ' ἐξωμὶς καὶ περίβλημα ῆν καὶ χιτών ἐτερομάσχαλος. Cf. Hesychius s.v. ἔξωμίς · χιτών ὁμοῦ καὶ ἰμάτιον, but what follows in Hesychius is a misunderstanding.

⁵ Bieber in AM. 38, pp. 268-279.

A, Vases de Hamilton 3, pl. 19; A, Tillyard, Hope Vases, pl. 19, 121.

⁷ I do not describe the patterns on garments either now or hereafter, as they are common at the time and do not help to identify the personages.





Fig. 2.—Calyx-Krater in the Possession of Messrs. Feuardent

black; the left arm is akimbo; but the attitude, the hair, the headband are much the same, and the thing in the right hand is the same long rod with flames issuing from the cup-like top. The other three figures, as before, are satyrs holding torches. The one on the left bears a real resemblance to the "Komos" of the Oxford vase, and the flame of his torch, as there, burns back. The right-hand satyr moves away with lighted torch, and the gesture of his raised right hand recalls the Oxford "Sikinnis." The third satyr is a curious figure with no fellow on the Oxford vase. He has not hitherto been recognised as a satyr: Tillyard calls him an old negro slave; but the tail, which Tillyard misses, is clearly visible in the original: it was white, like hair and beard, and the color has faded. What remains of the ear is equine. The face is satyresque and not negroid: if the lips protrude more than usual, and the cheek is puffed, it is because the old chap is out of breath. Dressed in a fawn-skin, he walks slowly towards Prometheus, supporting himself on a crooked stick. He makes one think of Euripides' old men. The top of his torch is now corroded, and it is impossible to say whether it was alight or not. In the photograph it almost looks as if the left-hand satyr were lighting his torch at the old satyr's; but I had not this impression in front of the original; and perhaps the gaffer, slow of step and suspicious, is the last to avail himself of the new wonder.

A third calyx-krater, Bologna 288 bis, is earlier than the other two, but not much, for it is in the later style of the vase-painter Polygnotos, and belongs to the thirties of the fifth century. Both pictures are figured by Pellegrini, and the reverse here, from a new photograph kindly sent me by Prof. Ducati (fig. 5). Neither picture is perfectly preserved. The obverse tells the story of Aphrodite and the Attic boatman Phaon. Pellegrini ³ describes the reverse as follows: "In the middle is Dionysos, his hair bound with a broad mitra, wearing a chiton girt round the waist, sleeve to the elbow, reaching to the calves, and made of thick material embroidered with various horizontal bands, resting on two long sticks (thyrsus-stalks without tufts) topped by knobs; two drunk satyrs dance furiously round him, one, his head back, throwing his arms out and snapping his fingers, the other making similar gestures." Pellegrini does not mention the boots worn by the chief person, and "leaning on two sticks" is not quite correct—he is holding them; nor need the sature be drunk, for "nemo saltat sobrius" hardly applies to satyrs. The strophion is broader than in the Oxford vase, although the hair is much the same as there. The dress is different: and here again I do not know any exact analogy. A decorated garment of stout material is often worn, both sole, and over a chiton, from the seventies or sixties of the fifth century onwards, and down to the end of the third quarter the decoration is very often of the same sort as here, characteristic being the double vees at the edges, and the loose curly strands like those of Persian zhizhims: 4 but our garment differs in two particulars from the usual type: it has short sleeves to the elbows, and it is much longer, reaching mid-calf instead of stopping above the knee or just below. The staff in the left hand is like those in the Oxford and Feuardent vases. In the other

¹ Hope Vases, p. 71. ² Vases in Poland, p. 54. ³ VF., pp. 134–5. ⁴ Cf. Buschor in FR. iii, p. 136. E.g.: with "zhizhim" decoration: volute-krater by the Niobid painter in Naples, FR. pl. 26–7, whence Pfuhl, fig. 505; calyx-krater in Munich, FR. pl. 7; pelike by the Kleophon painter in Munich, FR. pl. 29, whence Thiersch, Ependytes and Ephod, pl. 24. With other decoration: Pfuhl, figs. 582–3 and 593; Thiersch, pl. 24, 2 and pl. 25, 1.



Fig. 3.-Calyx-Krater in the Possession of Messrs. Feuardent



Fig. 4.—Fragment of a Krater from TTE Agora of Athens, P8448



Fig. 5.—Calyx-Krater in Bologna, 288 bis

staff the top is flatter: I do not know whether this is significant or not. I had not noticed any trace of flame issuing from either, and Prof. Ducati, who examined the places at my request, could find none. It will be remembered that the soil of Felsina is hostile to superposed red and white, and there may have been flames which have disappeared: lest this should sound like special pleading, see what I wrote of the Bologna vases long ago. The satyrs have no torches: but it looks as if the subject were taken from the same story as before, and the chief figure were not Dionysos, but Prometheus.

It was in a narthex, a stalk of giant fennel, according to Hesiod and the ancients, that Prometheus brought fire from heaven to earth. The wands held by the Titan on the vases are not definitely characterized as narthex, for the typical nodes or joints are missing.3 It is not as if vase-painters despised such small details: there are countless representations of nartheless on vases, for the thyrsus was a stalk of giant fennel with a bunch of ivy-leaves attached to the upper end,4 and the painter seldom fails to show the joints. At least the archaic vase-painter: the nodes were congenial to his style, which tends to see everything "in lengths"; later painters take much less interest in nodes, as may be seen from a glance at the work of the Dinos painter, of his forerunner the Kleophon painter, and of the Pronomos painter his follower. Look at the Berlin dinos itself,5 from which the artist has his name: the figures are larger and more careful than in the Oxford vase, yet the thyrsus-stalks are plain except for a leaflet near the head, or the stump of a leaflet, and only once does the base of the leaflet encroach a little on the stalk. In the Oxford cup by the Kleophon painter, only one thyrsus has a node, rendered by a single transverse line. In the Pronomos vase, the thyrsus of Dionysos has a plain stalk; in the bell-krater by the Pronomos painter, Berlin 2642,8 all three thyrsi are plain. Many other examples might be given, but these will suffice. As to the cup-like head of the narthex on the three Prometheus vases, it is the lower half of a node; the node, which is solid, has been stripped of its leaf and the upper half cut off: fire, applied to the inside of the lower half, smoulders there and endures.

It is perhaps conceivable that the combination of satyrs and Prometheus in one picture was due to a vase-painter, whether the Dinos painter or another. One vase in which satyrs are brought into connexion with heroic characters antedates the introduction of the satyr-play into Attica by many years: for the Attic black-figured cup in the Vatican with Perseus, Gorgons, Hermes, Athena and satyrs is by the "C painter" (or, as he may now be called, the Cheiron painter 10) and cannot be

¹ JHS. 49, p. 288.

² Sikes and Wilson, The Prometheus Vinctus, pp. IX-XXI; Bapp in Roscher s.v. Prometheus; Frazer Apollodorus i, pp. 51-3 and ii, pp. 326-50.

³ In the Bologna vase, a black band which might be taken for a joint, low down on the left-hand wand, is a repaint at a break. Half way down the Oxford wand is what looks like a joint, but I think it is only the fulness of the garment pulled down over the belt at the right hip and carelessly painted on top of the wand instead of being concealed by it.

⁴ That the head was of ivy-leaves is not learned from any ancient writer (as I carelessly stated in AJA. 1933, p. 400), but from representations only.

⁵ 2402: Furtwängler, Sammlung Sabouroff, pls. 56-7.

Vatican 335 (Mus. Greg. ii, pl. 92, 4-5; Albizzati, pls. 34-6); see MMS. 5, p. 113.

¹⁰ Martin Robertson in JHS. 55, pp. 224 and 227.

later than the second quarter of the sixth century. But there the satyrs are mere supers, and the action would be complete without them: in our vase they are essential. The subject is "Prometheus and the satyrs," and in all probability it was taken directly or indirectly from a satyr-play: for that is the ground on which satyrs and gods or heroes regularly meet.

Now "Prometheus and the Satyrs" is known to have been the subject of a satyrplay. Aeschylus wrote a satyr-play called *Prometheus*. The fact is preserved in the ancient hypothesis to the *Persians*: ἐπὶ Μένωνος τραγφδῶν Αἰσχύλος ἐνίκα

Φινεϊ, Πέρσαις, Γλαύκω Ποτνιεϊ, Προμηθεϊ. Menon was archon in 473-2.

Again, we learn from two passages in Pollux that Aeschylus wrote a play which was known as Προμηθεύς Πυρκαεύς "Prometheus Fire-lighter." The first (9, 156) is a bare mention: ὁ δ' ἐμπρήσας τάχ'ἄν πυρκαεύς ὀνομάζοιτο, κατ' Αἰσχύλον καὶ Σοφοκλέα οὕτως ἐπιγράψαντας τὰ δράματα, τὸν μὲν τὸν Προμηθέα, τὸν δὲ τὸν Ναύπλιον.

The second (10, 64) names, among things pertaining to gymnasia, ὡμόλινον, οὐ Κρατίνου μόνον εἴποντος τὸ ὡμόλινον ἀλλὰ καὶ Αἰσχύλου ἐν Προμηθεῖ Πυρκαεῖ, 'λίνα δὲ πίσσα κώμολίνου μακροὶ τόνοι'.¹

The anapaest in the fourth foot (not being part of a proper name) shows that the Purkaeus was a satyr-play. Unless Aeschylus wrote two satyr-plays on the subject of Prometheus, the Purkaeus is the play performed in 472. In any case we know not only of a "Prometheus and Satyrs" by Aeschylus, but of a "Prometheus Fire-lighter and Satyrs."

Now the subject of the pictures on the Oxford vase and the two others that go with it could not be better described than in the words "Prometheus Fire-lighter and Satyrs."

The Prometheus Purkaeus of Aeschylus, if, as is likely, it is identical with the Prometheus which concluded the tetralogy of the Persians, was produced in 472: our three vases were painted between 440 and 420. There may have been earlier representations of the subject, now lost; or the performance that inspired our pictures may have been not the original production in 472, but a revival a generation later. Our very scanty records do not mention revivals of plays until the fourth century: but the indirect evidence for the practice having begun in the fifth is strong. Herodotus' allusion to Phrynichos' Capture of Miletus has often been adduced; so has the psephisma quoted in the Life of Aeschylus. Aristophanes' references to Aeschylus are more cogent: the quotations in the Frogs cannot be addressed to the book-reading section of the audience alone; the Persians is spoken of in that play

¹ Of the other two fragments usually attributed to Prometheus Purkaeus, Nauck 206 (misnumbered 205 in Murray: ἐξευλαβοῦ . . .) is quoted by Galen from "Prometheus," without distinguishing epithet, and may be from the Luomenos; while Nauck 207 (τράγος γένειον . . . , rightly explained by Shorey in CP. 4, p. 435), may come from the Purkaeus, but the ancient writers who quote it name neither play nor author.

² Haigh, Attic Theatre, pp. 29–30 and 71–73.

^{*} καὶ ἐπέταξαν μηκέτι μηδένα χρᾶσθαι τούτω τῷ δράματι (Hdt. 6, 21).

^{4&#}x27; Αθηναΐοι δὲ τοσοῦτον ἡγάπησαν Αἰσχύλον ὡς ψηφίσασθαι μετὰ θάνατον αὐτοῦ τὸν βουλόμενον διδάσκειν τὰ Αἰσχύλου χόρον λαμβάνειν (Vita 12). τιμῆς δὲ μεγίστης ἔτυχε παρὰ 'Αθηναίοις ὁ Αἰσχύλος, καὶ μόνου αὐτοῦ τὰ δράματα ψηφίσματι κοινῷ καὶ μετὰ θάνατον ἐδιδάσκετο (schol. Ar. Ach. 11). The date of the decree is not stated. See also Wilamowitz, Aeschyli tragoediae, p. 11, ad §12.

(l. 1028), and the *Phrygians* of Aeschylus in another, in terms that suggest recent performances; and in the Acharnians of 425, Dikaiopolis, whom the young Lamachus calls γέρων (l. 1129), may be old enough to have witnessed the first performance of the Oresteia in 458, but when he complains that expecting Aeschylus he was fobbed off with the tragedian Theognis (ll. 9–11), he is evidently alluding not to his earliest memories as a playgoer, but to a quite recent experience which many of his hearers had shared and all of them could understand. This Theognis, moreover, became one of the thirty Tyrants in 404,² so it is rather unlikely that he was already having plays produced in the lifetime of Aeschylus, for that would make him at least seventy-five years of age when he took up a new and arduous career. Thus the Aristophanic evidence points to revivals of Aeschylean plays in the fifth century; and it is quite likely that satyr-plays were among those revived then, as they certainly were in later times; and if satyr-plays were revived in the fifth century, those of Aeschylus would have been among the first to be so honored: for in the satyr-play he was acknowledged to be supreme.

It is possible that a later tragedian may have written an unrecorded satyr-drama on exactly the same subject as the Prometheus Purkaeus of Aeschylus. Certainty is unattainable; but I think it will seem more likely that the origin is the Aeschylean play.

T

Besides the two pictures (Feuardent, Bologna) which by comparison with the inscribed vase in Oxford we supposed to represent Prometheus, there are others that ought to be examined in the new light. They all present difficulties; and my treatment of them may seem inconclusive.

The first is on a bell-krater of florid style in Yale (129: fig. 6). The date is probably the last decade of the fifth century: Baur's 430 is too early: a pelike in the Louvre, G 433, with an ordinary picture of Dionysos surrounded by satyrs and maenads, appears to be by the same hand. The Yale picture consists of five figures in rocky country. The middle one is a beardless youth moving quickly to the right and looking back. He is dressed in a chiton which reaches mid-calf, and a short fancy overgarment fastened by a plain belt. The hair is worn long over the neck, with a tainia tied loosely round it, and a wreath indicated by big white dots which may or may not signify ivy-leaves. High boots complete the costume. The right hand holds a torch, the left a curious sort of staff to which we shall return. In front of this youth, looking up at him, stands a satyr, with one foot raised and placed on a rock, his left forearm resting on his thigh and his right hand holding out a torch. Behind this satyr is another, on tiptoe, the right hand raised, the left holding a torch. On the other side of the youth a third satyr dances forward, torch in hand; a fourth, with a thyrsus

¹ Ar. fr. 678, Kock.

² Xenophon Hell. 2, 3, 2; Lysias 12, 6 ff.; schol. Ar. Ach. 11.

³ Performances of παλαιοί σάτυροι about the middle of the third century B.C.:—Körte in Hermes 73, 1938, p. 126. I owe this reference to Prof. Eduard Fraenkel.

Aly in Pauly-Wissowa, s.v. Satyrspiel.

⁵ A, Baur, Cat. of the Stoddard Coll., p. 86, and pl. 7, above.

⁶ A, Pottier, pl. 144; A, phot. Alinari 23712, whence Hahland pl. 1; CV. d pl. 43, 7-11 and 4 (not 6).

⁷ On the "short long" chiton see below, p. 638, note 2.



FIG. 6. - BELL-KRATER IN YALE, AFTER BAUR



6.7.—LEKYTHOS IN THE POSSESSION OF DR. JACOB HIRSCH



Fig. 8. - Bell-Krater in Gotha, 75: Reverse

but no torch, sets one knee on a rock and appears to have just arrived on the scene. The satyrs wear ivy-wreaths, and two of them fawnskins. The torches are all aflame.

The inscriptions are unfortunately mere semblances of letters.

We have described the figures as if the movement were from left to right, parallel to the plane of the eye; but really it comes diagonally, out of the picture, towards the spectator. The leader appears among his followers, and the scamper begins. One satyr takes his place in front of him and sets forward, half tripping, half dancing; the satyr on the left of the picture looks at the leader and is encouraged to start also; a third satyr waits gazing for the leader to pass, before falling in behind him; the fourth, on the right, has just come up and is still dazzled and amazed. Baur calls the leader Dionysos; and no one would demur if it were not for the unusual object in the left hand. It is true that the object in the right hand is also unusual—for Dionysos. Is Dionysos ever represented with a torch? Iakchos yes: but Dionysos? The lines in Aristophanes' Clouds may occur to the mind (603):

Παρνασσίαν θ' δς κατέχων πέτραν σὺν πεύκαις σελαγῆ Βάκχαις Δελφίσιν ἐμπρέπων κωμαστὴς Διόνυσος.

These, however, do not imply that the god himself held a torch: but in two passages of Euripides Dionysos holds a torch, or a pair of torches: Ion 716—

ΐνα Βάκχιος ἀμφιπύρους ἀνέχων πεύκας λαιψηρὰ πηδᾶ νυκτιπόλοις ἄμα σὺν Βάκχαις,

and Bacchae 144:1

Συρίας δ' ώς λιβάνου καπνὸν ὁ Βακχεὺς ἀνέχων πυρσώδη φλόγα πεύκας ἐκ νάρθηκος ἀίσσει

In art also there are two certain instances: on a black-figured neck-amphora by the Diosphos painter in the Cabinet des Médailles,² the infant Dionysos holds a pair of torches; and on a red-figured lekythos, from the third quarter of the fifth century, formerly in the Giudice collection, Agrigento, now in the possession of Dr. Jacob Hirsch, by whose kind permission I reproduce it here (fig. 7), Dionysos is dancing

¹ I owe the passage in the Bacchae to Prof. Fraenkel. The text is not quite in order: the above is Wilamowitz's reading, accepted by Murray. ἐκ νάρθηκος is supposed to mean that the torch is attached to or fitted into a narthex: Sandys compares Nonnus 7,340 – πυρσοφόρω νάρθηκι καταχθέα

πήχυν έρείσας. I do not see how this could be done.

On the sarcophagus from Torre Nova, which belongs to the second century A.D., Rizzo (RM. 25, p. 28) identifies a youth holding a torch as Dionysos, but this is uncertain (Möbius in AM. 60-61, p. 250).

³219 \dot{CV} . pl. 75, 6-7 and pl. 76, 2-3: see Haspels, ABL., pp. 96-7, and p. 238, no. 120. The symbol on certain Hellenistic coins of Athens (Svóronos, $Tr\acute{e}sor\ des\ monnaies\ d'Athènes$, pl. 62, 1-14) has been held to represent Dionysos seated, with a torch, and Demeter standing by him with a pair of torches: so Head in BM. $Coins\ of\ Attica$, p. 35 and Farnell, $Greek\ Cults\ 5$, pp. 140 and 246. But, first, the figures are not Dionysos and Demeter, they are Demeter and Kore, as was seen by Svoronos, $Das\ Athener\ Nationalmuseum$, p. 483, so also Pick in the index to Svoronos' $Tr\acute{e}sor$; secondly, the seated Demeter holds not a torch (Pick), but a sceptre, as on the relief squat lekythos in the Louvre (REG. 32, pl. 1). I have to thank Mr. E. S. G. Robinson and Mr. C. V. Sutherland for kindly examining the coins and casts with me.

with a torch in his hand: KAAO Σ is written on the left of the picture, [ΔI]ONV Σ O[Σ] on the right. This is sufficient evidence for Dionysos with the torch: but the certain instances are so few that whenever we find a figure that seems to be Dionysos, but holds a torch, I believe we ought to ask whether there may not be an alternative explanation, and if the picture contains other peculiar features, our doubt will be increased.

We now turn to the object in the left hand. Baur calls it a sceptre; and the barber's pole decoration of the shaft is indeed very common in sceptres. Is Dionysos ever given a sceptre? Rarely: but I know two instances: first, the stemless cup Athens 1237,1 and, second, a fragmentary bell-krater in Athens which belongs to the group of the Dinos painter: 2 similarly Poseidon is given a sceptre, instead of the trident, on Makron's skyphos in the British Museum.³ But the object on the Yale vase is no ordinary sceptre: it has a cup-like head hard to match in true sceptres,4 but really very like the half-node of the narthex held by Prometheus on the vases in Oxford, Paris, and Bologna. Dionysos has a right to the narthex. The narthex, as was said above, regularly forms the shaft of a thyrsus; and on Italiote vases, though not on Attic, it is often seen in the hands of Dionysos and his meinie, topped not by a bunch of ivy but by its own inflorescence; again, on Makron's skyphos in London,5 Dionysos bears the shaft only of the thyrsus – a stem of narthex – with a mere sprig or two of ivy at the top, whether growing from the stem, or held separately in the hand, it is not easy to be sure. Nor is there any fatal objection to the narthex being scepterized for greater splendor by twining a gold band round it: 6 there is no other instance of this, but a sort of analogy is furnished by the trident of Poseidon, which on two vases, the lekythos Syracuse 21884, in the late style of the Berlin painter, 7 and the calyx-krater Vienna 1026, by the Nekyia painter, is enhanced, like an ordinary sceptre, by a spiral band. What is hard to explain is the form of the head, produced by slicing off the upper half of the node: a form appropriate to Prometheus, but not to Dionysos.

¹ 1237 (CC. 1216: Heydemann GV., pl. 2, 2; AM. 53, Beilage 6, 2.).

² A, wedded pair in chariot, with Dionysos and Apollo; B, youth pursuing woman.

Dionysos holds a sceptre on the Faliscan rf. calyx-krater London F 479 (Walters, B.M. Cat. iv, pl. 13), but that is not good evidence for Greek usage.

Dionysos is occasionally given an ordinary knotted walking-stick: neck-amphora London E 279, by the Eucharides painter (BSA. 18, pl. 11; CV. pl. 15, 2); hydria Boulogne 449, by the Berlin painter; stamnos Castle Ashby 2, by the Berlin painter (BSR. 11, pl. 9, 2); lekythos by the Berlin painter in the market (Dionysos with stick, ivy, and kantharos); oinochoe, shape II, by the painter of the Yale lekythos in the collection of Marchesa Isabella Guglielmi, Rome; calyx-krater from the group of Polygnotos, Tarquinia RC 4197 (JdI.34, p. 133). All these are Attic: on an Italiote bell-krater in Boston Dionysos has a short stick. Similarly, on a volute-krater in the Jatta collection at Ruvo (1088: Bull. Nap. n.s. 1, pl. 6), by the Italiote painter of the Birth of Dionysos (Tillyard, Früht., p. 42, no. 94), Apollo has an ordinary walking-stick. On Hermes with a stick instead of a caduceus see JHS. 59, p. 39.

³ E 140 (FR. pl. 161).

⁴ Prof. Baur and Mr. D. von Bothmer kindly examined the original for me: they report that the right half of the head is genuine, the rest chipped away and in Reichhold's drawing restored.

⁵ See note 3, above.

[°] So Parrhasios, ὑπὸ τρυφῆς, turned his stick into a sceptre: . . . σκίπωνί τε ἐστηρίζετο χρυσᾶς ἑλικας ἐμπεπαισμένω (Athenaeus 12,543 f), . . . κατεῖχε δὲ καὶ σκίπωνα χρυσᾶς ἐλικας ἔχουτα περιερπούσας (Aelian V.H., 10, 11, 15): both apparently from Theophrastus περὶ εὐδαιμονίας.

⁷ MonAnt. 17, pl. 15, 2.

^{*} AZ. 1883, pl. 18; MMS. 5, pp. 132–3.

But is the torch, held in the right hand of the leader, appropriate to Prometheus? That Prometheus holding a torch was a possible conception in the late fifth century is shown by a passage in Euripides, *Phoenician Women*, 1121: one of the charges on Tydeus' shield was Prometheus holding a torch:

δεξιᾶ δὲ λαμπάδα

Τιτάν Προμηθεύς ἔφερεν, ώς πρήσων πόλιν.1

The play was produced between 411 and 409 B.C.: our vase belongs to the last decade of the century. Again, torch-races were run at Athens in honor of Prometheus: in fact there is good reason to suppose that the λαμπὰς at the Promethia was the original one, and that those at the Hephaistia, Panathenaia, and other festivals were derived from it. Lastly, if there was a satyr-play in which Prometheus lit the torches of the satyrs, one of the incidents in it must have been the invention of torches, which cannot have been known on earth before the introduction of fire. Prometheus must have instructed the satyrs how to make them. He may even have reappeared himself with a sample in his hand: whether or not, a good ending to the play would have been, as in the *Eumenides*, a torch-light procession: headed by Prometheus himself. The Yale vase would then represent the last episode in the plot: Prometheus carrying in one hand the narthex in which he had brought the fire, in the other a torch to which the fire was supposed to have been transferred; the satyrs clustering round him, their torches blazing.

One difficulty remains. It is hard to think of Prometheus as a beardless youth, and he is usually bearded in antiquity. But the Yale vase would represent him before his sufferings began; and in the sixth century, at least, he might be represented as beardless, for Prof. Fraenkel reminds me of the Laconian cup in the Vatican: 4 whether in the late fifth century is another question.

Summing up, we come round again to what was said at the outset: the only real objection to Dionysos is the object in the left hand; and if that could be explained, the case against him would collapse.

The next vase to be considered is another Attic bell-krater of florid style, Gotha 75. The artist is the Nikias painter,⁵ and the vase is of the same period as the last, perhaps a few years earlier. The reproductions are from photographs by my wife, taken with the kind permission of Dr. Purgold (pl. XIV). The reverse, three degenerate figures of youths (fig. 8, p. 627), does not concern us, but is worth showing for comparison with other reverses by the same hand. On the obverse there are five figures. Four of them are satyrs. The chief person is a man in the same attitude—body and

¹ This is of course a perversion of Aeschylus, Septem 432: πυρφόρος there suggested Προμηθεύς to Euripides and down it went, although Prometheus has no connexion with the burning of cities, except that as introducer of fire he was responsible for that also: similarly at the Paris exhibition of 1937 the Pavillon des Pompiers was decorated with wall-paintings representing the story of Prometheus.

² Farnell, *Greek Cults* 5, pp. 378–386; Deubner, *Attische Feste*, pp. 211–2. According to Servius (on Virgil *Buc*. 6, 42) Prometheus "stole fire by applying a torch to the wheel of the sun" (adhibita facula ad rotam solis ignem furatus). But this was hardly the Aeschylean version. Myth. Vat. says "ferulam rotae Phoebi applicans."

³ The property narthex would not of course be a real one, but a torch disguised.

⁴ Mus. Greg. ii, pl. 71, 3; Albizzati, Vasi del Vaticano, pl. 17,220.

⁵ CV. Oxford, p. 122 on pl. 66, 40. Since published by Brommer, Satyroi, fig. 19. On the painter, AV. pp. 466 and 479.

legs – as the Prometheus in Oxford and Paris; and the hair, bound with a thin fillet (done in white or red), and wreathed, is nearly as long. He wears a fancy chiton, belted, and covering the knees; over this a chlamys secured by a brooch at the pit of the neck. Like the Bologna 'Prometheus', he holds two long staves, and flames issue from both at the top. The one in his right hand is an ordinary torch. The one in his left is also a kind of torch, but of an unusual variety which I have not noticed elsewhere. It consists of a single stem, thicker than the components of an ordinary torch, and cleft down for nearly a quarter of its length: the line down the middle ceases well before the hand. The stem is bound at intervals, just as in the torch: the binding being indicated by six pairs of short transverse relief-lines (the bottom pair reduced to a single, as the painter was getting too near the end). Now this may be a torch of pine like the others; but the cleft points to a stalk with pith inside it, in which the fire might smoulder. And what is the use of the bindings? The upper one keeps the two halves of the stalk from falling apart; when the flame has burnt down to the binding, the stalk will be cleft down again as far as the next; and so on. I confess that I do not know of anything like this, nor did the late Prof. Henry Balfour whom I consulted: the cleft stick recalled to him a certain type of fire-maker, but there is no sign of the stone and string which constitute the rest of the contrivance. I do not wish to attach too much importance to the difference between the two torches, and it is possible that the second is merely a careless version of the first: but I think it proper to point out the difference.

Three of the satyrs are empty-handed: they are dancing round the person with the torches, and the one nearest the middle is executing the sikinnis. The fourth satyr, on the extreme right of the picture, seems familiar: indeed it is simply the aged satyr-Silenos he may surely be called-of the Feuardent vase, but turned to left instead of right. Long hair, beard, and tail are snowy white; his tail hangs down listlessly; he holds a stick in one hand to support his steps, and in the other a torch, perhaps not yet lighted, but I did not note this point, and cannot be certain from

the photograph.

I had thought of the principal figure as Dionysos: but in view of the resemblance to the Prometheus vases it should be considered whether he may not be Prometheus rather than the god of wine.2 The wreath might seem to be against Dionysos: all five figures are wreathed, and in the satyrs the wreath is distinctly ivy; in the fifth figure they are long for ivy; nor are they vine. But Dionysos is occasionally given a wreath that is neither vine nor ivy: so on a cup by the Ambrosios painter in Oxford,3 and on a pyxis of the Meidian group in Carlsruhe, 296. As to the torches, it was shown above that they suit Prometheus, but cannot be denied to Dionysos. Here also I leave the question open.

If the Gotha vase should turn out to represent Prometheus, could we be sure that the man with a torch on a fragment in Oxford 4 was Dionysos? It comes from a smallish bell-krater by the Lykaon painter,5 one of the companions of the vasepainter Polygnotos, and still belongs to the forties, or at latest the early thirties.

¹ The painter has inadvertently omitted the left foot. ² So also Brommer, Satyroi, p. 00.

² 1917.55: CV. pl. 1, 3, but the wreath is hardly visible in the reproduction.

^{4 1927.4:} CV. pl. 66, 40. 5 AV. p. 399, no. 9.

Fig. 9, p. 634, is from a drawing, which shows some of the details more clearly than the photograph published in the *Corpus*. The man (or youth, one cannot say which) wears a chiton, and over it a plain garment of thicker material, girt at the waist. The hair is long at the nape. The body is frontal, the head turned to the left. One hand holds an ordinary torch, the other is lost. The flame, which does not come out in the reproduction, is rendered in an unusual manner, in black, slightly raised, against the black background, as if to stress its smokiness. To right of the man, a satyr dances, wearing the perizoma—the drawers, complete with phallus, of the satyr-play. There was very likely another satyr in the lost half of the picture.

In fragments the possibilities are more numerous than in complete vases, and it is only fair to point out that the Oxford figures, as far as they go, much resemble two of those on a volute-krater in Ferrara. The date of the Ferrara vase is not long after the middle of the fifth century, the artist a follower of the Niobid painter—the painter of Bologna 479. Of the four pictures on the vase, that which concerns us, on the neck, has been studied by several scholars, most recently by Buschor in his Feldmäuse. In the middle, a goddess rises from the ground; satyrs dance round her with big hammers; and behind her stands a man with a torch in each hand. His hair is long at the nape, and wreathed with laurel, olive, or the like; he wears a short chiton, and over it a short garment of thicker stuff, with the upper part pulled down so as to conceal the girdle, neither garment reaching the knee. The torches are drawn roughly, with the ties, it seems, omitted, but they are certainly torches; the flames are faded, but visible in the original (on the photographs published by Buschor they are retouched). Buschor calls the goddess Kore, and the man behind her the high priest at Eleusis, comparing the priestly figures on the Sabouroff painter's cup in Munich 3 and a skyphos by the painter of the Yale lekythos in Brussels, 4 to which we may add the middle figure on the reverse of a stamnos by Polygnotos, Florence 75748,5 a bearded man with long hair and a strophion, dressed in a short chiton and holding two torches, between a woman and a man holding a sceptre: the subject on the front of the Florence vase is Triptolemos with Demeter and Persephone, and the figures on the back are no doubt Eleusinian worthies. I accept Buschor's interpretation. Previous investigators had called the goddess Pandora: if this were right, the name of Prometheus would suggest itself for the man behind here; but the torches would be inexplicable in such a context, and I cannot think the identification possible.

If it is hard to be sure who the Oxford torch-bearer is, there will be no less difficulty about a damaged sherd in Bologna, 267, and the complete but much abbreviated representation on a little vase in Cairo. The Bologna sherd, which is probably from a volute- or a column-krater, is figured by Pellegrini. The date is about 430. Head and shoulders of a man remain: hair, strophion, embroidered garment connect the figure with the Bologna calyx-krater and the other vases we have examined; the flaming torch seen to the right of him was almost certainly in his hand. The Cairo

¹ MonLinc. 33, pls. 1-3 and p. 6, whence RM. 47, p. 124; Aurigemma¹, 53 and 217-253 and 259; part, Buschor in Feldmäuse (in Sitz.Bay.Ak. 1937), p. 19, fig. 7.

² Op. cit., pp. 19-21.

FR. pl. 65; this figure, Buschor, op. cit., p. 19, fig. 8, left.
 CV. pl. 18, 1; this figure, Buschor, l.c., right.
 CV. pl. 55.
 VF. p. 110.

vase, published by Edgar, is one of those small squat lekythoi decorated with busts — head and shoulders of Hermes, Artemis, Selene and others—: in ours, which must be a little after 440 B.C., it is a bearded man with hair covering the nape and bound with a strophion, wearing an ornamented garment and shouldering a torch: Dionysos? or another?

The next vase I owe to Dr. Frank Brommer. I had seen it before I knew of the Oxford krater, and noted that the torch-bearer was not necessarily Dionysos, but I forgot about it. Dr. Brommer, in the light of the Oxford kr. ter, identified the figure as Prometheus. The vase, an oinochoe of the fourth shape (that with flat mouth) was found at Spina and is now in Ferrara, where it is labelled "sequestro Trieste 27.2.28." In style it goes with three other oinochoai of the same type in Ferrara, two of them found in tomb 734 at Spina, the third in tomb 142: the date is about the end of the fifth century. The contrast between the excited satyrs and the quiet figure in the middle is gone: all three figures are rushing to the right: in the middle, a man with a lighted torch in each hand, looking round; in front of him a satyr, also looking round; behind, another satyr with both arms stretched out. The man wears a belted chiton which clears the left knee and covers the right. The hair, parted in the middle, is short, but rather full at the nape; the beard is rounded. I am not at all sure that this is Prometheus; but I must say it does not look very like Dionysos.

A pelike in Berlin, inv. 3984, is of the same period as the Ferrara oinochoe and resembles it in some respects. The picture on the obverse (fig. 10), which I publish with the kind permission of Prof. Neugebauer from a photograph given me by Dr. Luschey, consists of two figures, both hastening to the right. One is a bearded man with a torch in each hand, looking back. His attitude is much like that of the chief figure on the Ferrara vase. He wears a short fancy chiton; has a tainia tied round his head, and an ivy-wreath. He is followed by an old satyr with white hair and beard (now faded), who also holds a torch in each hand. All four torches are alight. I do not feel sure that the man is not Dionysos. The back of the vase, with a youth in a himation holding a strigil, is not connected with the front.

Here I ought perhaps to mention a very odd Italiote vase—the only one among all these Attic—a pelike that was formerly in the Morchini collection and is said to be in Turin. I have not seen it and know it only from the drawings published, after Quaranta, by Gerhard.² On one side, not figured here, Herakles appears in the Garden of the Hesperides. On the other (fig. 11), a man wearing a short chiton, a cloak, and winged boots, rushes along, looking round, with a torch in his right hand and a thyrsus in his left. Two satyrs—a bearded and a youthful—dance one on each side of him. Below, a third satyr reclines on a panther-skin. Above, a woman, Micallike, looks out of a window. Now the greater part of the vase must be ancient: for the style is unmistakably that of a known artist, one of the two most important Lucanian painters in the second half of the fourth century.³ I feel doubtful, however,

¹ Edgar, pl. 12, no. 26211.
² Akademische Abhandlungen, pl. 21, 1-3.

³ These are the works of this artist, who may be called the Primato painter because one of his vases was published in that rather obscure periodical: those marked "Alb." were put together by Albizzati (Atti Pont. Acc. 14, pp. 172-3).

Volute-kraters. Naples 1762 (Millingen PVA. pls. 29-30; A, JdI. 27, p. 292; B, Patroni p. 122).
Naples 1761 (A, Millingen PVA. pl. 16; detail, Primato artistico italiano 1920, p. 10: Alb.; much

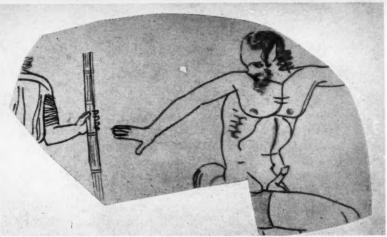


Fig. 9. - Fragment of a Bell-Krater in Oxford, 1927.4



Fig. 10. – Pelike in Berlin, Inv. 3984

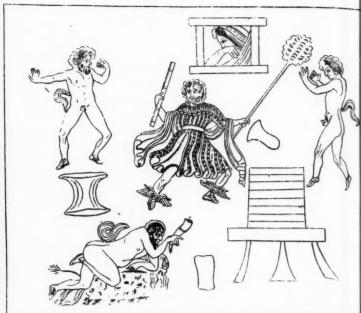


Fig. 11.—Italiote Pelike, in Tarin (?), After Gerhard

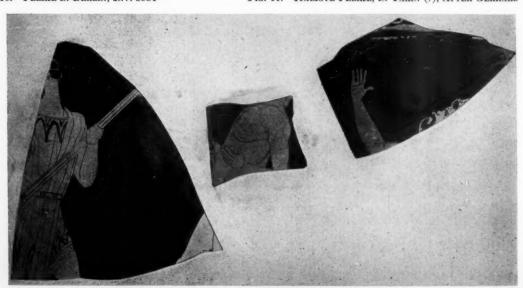


Fig. 12.—Fragments of a Bell-Krater in Syracuse

about the reclining satyr, and still more doubtful about the pieces of furniture, or whatever they are, in the same picture. Perhaps these are restorations; and the winged boots? The principal figure looks more like a mortal king—Pentheus or the like—than Dionysos: but I make no suggestion.

Three fragments, from Camarina, in Syracuse, published in fig. 12 by kind permission of Dr. Cultrera from photographs by my wife, take us back to the thirties of the fifth century or near, for they come from a bell-krater in a style not far removed from the Kleophon painter. The chief figure, we may be sure, was that to the left of the largest fragment: a man (part of the beard is preserved) moving quickly to right, looking round, the hair worn shortish, but not cut close, and wreathed, as it seems, with small leaves. He wears a short chiton of stout material, with the same type of decoration as in the Bologna calyx-krater; it is loosely girt; and a cloak worn over the left shoulder and right arm passes through the belt. He grasps a torch with both hands. Two fingers of the right hand show at the left edge of the fragment. On the right are the thighs of a naked figure, set somewhat forward, moving to left. It may be that the upper part of this figure is given by the second fragment, which faces left and must have been in the right half of the picture; moreover it leans well back, which agrees with the position of the bare thighs on the first fragment. What you see between left flank and left arm is the upper part of the right arm. The right hand holds a torch. A little light-colored hair is left on the neck, and I had the impression that part of this had once been painted white. The figure was probably a satyr; and that on the third fragment was certainly so. This must also have come from the right half of the picture. There is hardly room for more figures in that half, so the satyr will have been the end figure on the right. The head is thrown back, with brow wrinkled and mouth open, and comes rather low on the vase. The right arm is raised, and the left hand seems to have grasped the head-the remains to

restored). Vatican (Raoul-Rochette, pl. 38; JdI. 27, p. 295; Alb.). Madrid 11197 (L. 331: A, Leroux, pl. 41). Naples 1991 (Patroni, p. 121; Alb.). Louvre (Herakles with Hermes and Nike). Panathenaic amphorae. Munich 3263 (J. 845: Lau, pl. 41, 2; JdI. 27, p. 297; Alb.). Schwerin (A, statue of rider, with youth and woman). Louvre (Eros flying with sash). Louvre K 529.

Pelike. Turin? (fig. 11).

Nestorides. Berlin 3145 (Millingen PVA. pl. 11). Louvre K 538 (Millin PVA. 2, pl. 71) Louvre K 537 (Millin PVA. 1, pls. 68–9). Naples 3250 (A, Patroni, p. 123; A, JdI. 27, p. 301, fig. 26; Alb.). Carlsruhe 372 (Él. 4, p. 44). Naples 1809 (JdI. 27, p. 301, fig. 25). Louvre K 541. Louvre K 534. Naples 1894 (Patroni, p. 117 fig. 76). Naples 1892 (A, Patroni, p. 117, fig. 77). London F 497. Halle 16. Goettingen F 3153. Oxford.

Hydriai. Vatican (Atti Pont. Acc. 14, p. 183.; Alb.) Vatican (ibid. 14, p. 182; Primato 1920, p. 11, fig. 3; Alb.). Vatican 826 (women). Louvre K 526. Munich (seated youth, and Nike). Palermo

(youth and Nike).

Lebetes. London F 342 (Él. 4, pl. 36). Carlsruhe 454.

Oinochoai shape 3. Louvre K 548 (phot. Giraudon 15147, 1). Louvre K 547.

Lekythoi. Naples 2339 (JdI. 27, p. 277: Alb.). Louvre K 565 (phot. Giraudon 15147,2). Naples 2004 (Patroni, p. 127, fig. 87).

Squat lekythoi. Naples 2900 (Millingen PVA. pl. 41, whence Él. 4, pl. 87; Patroni, p. 127, fig. 88).
Copenhagen, Thorvaldsen Museum (head of woman with bird on finger). Vatican 863 (Eros flying). Vatican 844 (Eros). Vatican 863 (female head).

Skyphoi. Vatican (Atti Pont. Acc. 14, pp. 184-5; Alb.). Louvre K 555. Vatican (A, woman with box). Louvre K 557. Louvre K 558.

The early vases Berlin 3145, Naples 1762, Schwerin, Naples 2339, show that the style of the painter is derived from Apulian vases of the stage just preceding the Darius krater.

right of the forehead-hair look like parts of thumb and fore-finger: one would guess that the satyr was dancing or rushing rightwards, and looking back. The edge of the upper pattern of the vase is preserved above. There must have been another figure to left of the principal, or more probably two.

The costume, with the short fancy chiton and the cloak over both shoulders and passing through the belt, recalls the dadouchos on a stamnos in Eleusis, recently published in full by Kourouniotis, although there a thin chiton, reaching to mid-calf, is worn under the fancy garment. But I do not think that anyone will wish to identify our figure as the dadouchos at Eleusis. As to the manner of wearing the cloak, it is natural, if one desires to have both arms free, to tuck it through the belt at both sides, and an Amazon does this on the calyx-krater in Geneva.

Dionysos? or perhaps Prometheus?

A figure not unlike the man on the krater in Syracuse occurs on a column-krater of the same period, about 430 B.C., by the Orpheus painter,3 in Athens.4 The picture on the reverse, the usual trio of youths, is of no consequence. The lower part of the obverse is missing. Hirschfeld, who published the drawing from which fig. 13 is taken, thought that the picture was based on a drama:-"Dionysos threatens a satyr with a long spear. Behind Dionysos, a second satyr shrinks away, rubbing the sore place on his back with his hand; a third satyr, with a big stick, has thought of attacking Dionysos, but recoils." Thraemer also speaks of Dionysos as chastising a satur with a spear. Hevdemann fremarked that the object held by Dionysos was not a spear: he called it a thyrsus-stem, and was followed by Collignon: as a matter of fact it is nothing but an ordinary torch, with the flame indicated; and what the third satyr holds is not a stick, but a thyrsus, the head of which is cut off by the side border. In the middle of the picture, then, a man with a strophion round his longish hair, dressed in a long chiton with a fancy over-garment reaching almost as far as the knees, rushes to the right, holding a torch in both hands. He looks round perhaps threateningly or warningly - at a satyr who comes dancing up with outstretched arms, something like the left-hand satyrs on the krater in Gotha and the Ferrara oinochoe. Behind the chief person a second satyr turns tail, looking round, and protecting his back-perhaps a sore place there 7-with his hand. A third satyr comes up with a thyrsus in his hand, but seems to recoil in alarm. Prometheus and the satyrs pressing him too hard? Or Dionysos chastising his unruly followers?

I have not seen the original of fig. 14, which is taken from a drawing in Hartwig's apparatus. In 1899 the vase, a small bell-krater, was in the possession of the Florentine dealer Pacini, and I learn from Mr. D. von Bothmer that it is now in the University Museum, Philadelphia. The date is about 430, and the style not far from the Kleophon painter. The reverse, not reproduced, is said to represent "a man in a himation with a sceptre." On the obverse, two figures: a bearded man in much the same attitude as the Oxford Prometheus: hair long at the neck, with a sort of

¹ 'Εφ. 1937, pp. 227–251: the dadouchos already figured in Kourouniotis, *Eleusis*, p. 21 and Thiersch, *Ependytes und Ephod*, pl. 54, 1. Outskirts of the group of Polygnotos.

FR. ii, p. 314, fig. 105, whence (part) Pfuhl, fig. 509.
 A list of his works in AV. p. 419.
 1167 (CC. 1339): A, AZ. 1873, pl. 14; A, CC. pl. 45. The lower part of the picture on A is missing.
 In Roscher i, p. 1108.
 GV., pl. 2, 2.

⁷ ὅπου τις άλγεῖ κεῖσε καὶ τὴν χεῖρ' ἔχει, fr. trag. adesp. 385 Nauck; cf. Demosthenes Phil. i, 40.



Fig. 13.—Column-Krater in Athens, 1167, After AZ. 1873, pl. 14



Fig. 14. — Bell-Krater in Philadelphia, L 29–45

stephane consisting of a band surmounted by leaves; a chiton reaching past the knees, and over it a short fancy garment, belted. Facing him, a satyr in the same attitude, for body and legs, as Sikinnis on the Oxford vase and the corresponding figure in Gotha: he holds an ordinary torch in both hands, and he does almost look as if he were lighting it at the thing in the hand of the man. What is that thing? It is neither a torch, nor a stalk of fennel. It seems to be a kind of sceptre: the shaft, which has the usual barber's pole decoration, ends above peculiarly in a hemispherical knob with a nipple on top. The holder may be Dionysos, and the satyr may not really be lighting his torch at all: but the resemblances to the Oxford vase, and the sceptre—rarely, as we saw, given to Dionysos—make the picture worth figuring, even if the interpretation is doubtful. Perhaps I should add that the "short long" chiton, reaching to mid-calf or so, is not confined to Dionysos.

The last picture to be dealt with, and one of the most puzzling, is on a lekanis-lid in Berlin, 2578, which is contemporary with the Oxford krater, but I do not know any other works by the same hand. I owe photographs, and permission to publish them, to the kindness of Prof. Neugebauer. There are seven persons: and it should be said that the division in pl. XV is misleading: the two photographs are not on the same scale, and this could not be made good in reproduction because they are not from quite the same angle either. There are really two groups—a five and a pair. Of the five, four are satyrs, but the chief figure is a man moving rapidly to the right, and looking round with head bent. His short chiton does not reach the knees; over it he wears a fancy garment of thicker material, belted. The high laced boots with fur lappets are often given to Dionysos, but are not confined to him; they were widely worn by travellers, horsemen, hunters, and servants.3 On his hair, which is longish, there is a wreath of long leaves - laurel, olive, or the like. He looks down at the long rod or staff which he holds in both hands. The shaft of this is decorated like a barber's pole. The head of it has a very curious form-two ovals, with various crosslines. On either side of him is a satyr holding a torch; and beyond each of these is another satyr, without torch, dancing.

The second group consists of two satyrs: the right-hand one kneels, his left forearm resting on his thigh, and his right arm extended with a torch, the end of which touches the ground; he looks down at the torch. The other satyr stands facing him, also holding a torch, with the end on the ground, so that it crosses his companion's torch: he holds it with both hands and looks down towards it.

¹ A tracing kindly sent me by Mr. von Bothmer shows that Hartwig's drawing is correct in the main, but the underside of the knob is flatter in the original, and there seems to be no butt.

² For example: travellers and servants, Apulian mascaroon-krater in Naples, 3255 (*Mon. nouv. ann.*, pls. 5–6); horsemen, frieze of the Parthenon, Hephaistos riding a donkey on the kalyx-krater Munich 2384 (*FR.* pl. 7); hunter, Artemis on a Nolan amphora in the Paris market (Feuardent: Tillyard, pls.

11, 95); traveller, Apollo slaying Tityos on the Berlin pelike inv. 3189 (FR. iii, p. 279).

² Warriors: calyx-krater in Vienna, 984; pelike in Athens, 15882 ('Eφ. 1937, p. 233). Amazon: bell-krater by the Kleophon painter, Sammlung Ruesch, pl. 8. Citharode: pelike by the Cassel painter in Athens, 1469 ('Eφ. 1937, p. 232). Artemis: bell-krater in the manner of the Dinos painter, Berlin 2641 (Él. cér. 2, pl. 44). Prometheus: the Oxford krater. Sometimes it is a long chiton shortened by pulling up over the girdle, sometimes it must be a chitoniskos woven longish. Thiersch say (Ependytes und Ephod, pp. 34-5) that Dionysos is the only deity to wear such a chiton (which he identifies with the βασσάρα and the Διουνσιακός χιτών), but the Berlin vase shows that this is not so.

Furtwängler, in his description of the picture, begins with the smaller group, which looks, he says, like "a sort of bayonet-fight with torches." If that is what the artist intended he has not been successful: this would be one of the limpest representations of the subject in art. He might at least have let the kneeling satyr take two hands to it, and given the other a less patient appearance. The group looks more like one satyr lighting his torch at the other's. The left-hand satyr's torch would be alight; he would be sinking it so that the flame might burn up nicely, and his friend would be watching and waiting till this happened. Against this, that there is no indication of flame: Furtwängler says that the torches are unlighted, and Prof. Neugebauer tells me that he can see no trace of flame. The surface of the vase is badly damaged, and red or white details may have disappeared: but I should feel happier if the left-hand torch were alight.

Dr. Jacobsthal suggests to me that the satyrs may be extinguishing their torches by pressing them into the ground; but the gesture of the right-hand one does not seem suitable.

In the larger scene, Furtwängler thinks that "Dionysos is rushing in between the two satyrs to left and right of him, who have been engaged in the same activity" as the two satyrs of the smaller group: "he interrupts them by knocking their torches apart with his sceptre; the satyr on the left, to whom he turns round, starts back, extending his left arm to the god as if rebuking him; the other seems to be still deep in his game. Behind these satyrs are two others, hopping and stretching out their arms towards the main scene as if in mockery." I do not feel sure about all this: it does not seem clear that the first two satyrs are being parted, or that the dancers are mocking them. If the object in the middle were a narthex, or even a torch, one might think of Prometheus, and the attitudes of the satyrs would suit well enough: but it is not a narthex; and I cannot guess what it is: so once more I end with a question-mark.

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¹ Vasen im Antiquarium, pp. 727-8.

MIMA SALTATRICULA

The little bronze statuette shown in fig. 1 is in the possession of Professor Friend in Princeton. He bought it from a Syrian dealer in New York, who said that it was found near Hama, not far from Beyrouth in Syria.

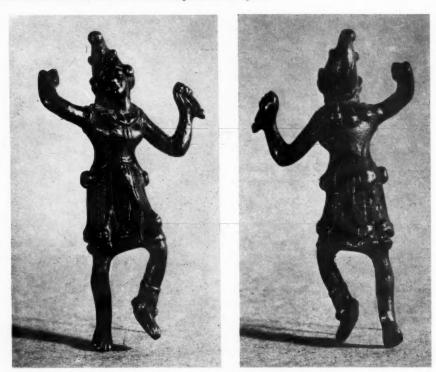


FIG. 1.-FEMALE DANCER. BRONZE STATUETTE, PRINCETON

The figure is engaged in lively movement: dancing, gesticulating and making music at the same time. She stands on the toes of the right foot. The left leg is lifted and a scabellum (crupezion, κρουπέζιον) is attached to the sole of the buskin, a clapper under the foot, like the one of the satyr with foot clapper in the Tribuna of the Uffizi in Florence ² and of a satyr on a mosaic in the Library of the Vatican.³

¹ H.O.075 m. I wish to thank Professor Friend for his great kindness and courtesy in letting me study the original and in giving me permission to publish it.

² Amelung, Führer durch Florenz, p. 43 f., No. 6, 5; Klein. Zeitschrift für bildende Kunst xx, 1909, pp. 103 ff. and Vom antiken Rokoko, pp. 46 f., fig. 14; F. Weege, Der Tanz, p. 13, fig. 11; Arndt-Amelung-Lippold, Text to Einzelverkauf, Nos. 2641–2; Lawrence, Later Greek Sculpture, pp. 18 f. and 110, pl. 30. He was probably playing the flute and beating rhythm for a nymph to dance, as on the mosaic and Arretine vase, note 3, and not himself dancing, as Lawrence assumes.

³ Thédenat in Daremberg-Saglio s. v. scabellum, iv, 1106, fig. 6142; Navarre, ibid., s.v. pantomimus, p. 317, fig. 5504. Cf. for the use of the foot clapper to give the rhythm, Pollux vii, 87; Lucian, de salt., 10; and Weege, Der Tanz, p. 13 f., fig. 12; Chase, Loeb Collection of Arretine Pottery, pl. V, No. 125.

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Both these satyrs play flutes at the same time. The bronze statuette of Mr. Friend, however, has in her hands not flutes, but more clappers, hand clappers, consisting of two beds of wood with bells between them.¹ She lifts both arms to the side, the right one higher than the left, and throws her head backward and sideways to the right. These violent movements are accompanied by the tingling of many bells, for besides the three clappers there are twenty-two bells attached to her dress. One big one is at the top of her pointed hat, three at the ends of the three strips standing up at the front of the cap, and three at the three pointed strips hanging down from the cap in the back, making seven for the cap. Three big ones hang down from the lowest point of the three scallops into which the jacket covering the body is cut, one on each hip, and one in the back. Then there are eight more at the pointed ends of the eight strips hanging down from the belt over the tunic. Four more bells are at the end of the four pointed strips ornamenting the buskin of the left foot. Thus each movement was emphasized by the rhythm of the clappers and the tingling of the bells.

Who is the dancing lady? I think she is a mime. The characteristic dress of the mimes was the *centunculus*, a dress made of a hundred pieces, in contrast to the *syrma*, the long-trained robe of tragedy, and of the gaily colored dress of the comic actor.² The clothing of the dancer is really constructed out of an unusually large number of smaller pieces, in contrast to the Greek dress of everyday life which is generally of one piece, as well as the Roman dress which consists of a small number of pieces.³ There is in addition to the belted tunic the jacket, cut in big scallops, open in front, and with a frilled collar. The long strips hanging down from the girdle consist of many narrow horizontal stripes, which in the original dress may have been gaily colored in striking contrast, and must have contributed to the impression of a dress made of one hundred shreds or patches. The frilled collar may be the *recinium* or *ricinium*, described as a *palliolum*, or small overdress of the mimes.⁴ Another expression used for the mimes is *planipedes*,⁵ bare feet, which is also borne out by the statuette, for the buskin of the left foot is not foot-gear, but a contrivance for attaching firmly the clapper, while the right foot is clearly nude.

The high-peaked cap (pilos, $\pi i \lambda o_5$) is a well known feature of farce, comedy, mimes, and buffoons.⁶ The rather stiff peak is bent forward here on account of the heavy bell attached to it.⁷

The history of the mime and of mime actors has been well investigated by Diet-

¹ Right hand is broken, but a piece of the clapper is preserved.

² Apuleius, Apologia sive de magia xiii, p. 416: uti me consuesse tragoedi syrmate, histrionis crocota, mimi centunculo; cf. Seneca, Epist. moralia xi, 1, 80, 8; Driessen, Der Ursprung des Harlekin, pp. 66 ff.

³ Cf. Bieber, Griechische Kleidung, 1928, and Entwicklungsgeschichte der griech. Tracht, 1934; Lillian B. Wilson, The Clothing of the Ancient Romans, the Johns Hopkins University Press, 1938.

⁴ Fest., p. 274, b 32; 342, 20, Varro, v, 132.

⁶ Diomedes, Gramm. Lat. (ed. Keil) iii, 490. Cf. Petron. Sat., 19: non cothurno aut socco nituntur mimicus risus.

 $^{^6}$ Dietrich, *Pulcinella*, pp. 141 ff., 168 ff., figs. on pp. 142, 152, 160 f., 181. Zahn, κτῶ χρῶ, 81. Berl. Winckelmannsprogramm 1923, p. 6, fig. 2, pls. II–III; F. Weege, Der Tanz, p. 11, fig. 9 and p. 170 f., fig. 241; Shear, AJA. xlii, 1938, p. 7 f., fig. 8b and Lehmann-Hartleben ibid., p. 83, pl. XV B. Cf. Martial, XI, 6 for the pilos as a sign of freedom of speech.

⁷ A parallel to a bell attached to the peak of the cap is seen in F. Weege, Der Tanz, p. 168, Abb. 238.

rich, Reich and Horowitz.1 They, however, did not yet know that the costume of the mime, the high-peaked cap as well as the *centunculus* are found already in Etruria in the sixth century B.C. Among the dancers in the funeral games in the Tomba del Pulcinella there is a masked harlequin, whose name is Phersu, which means persona, mask, character.3 When the Etruscan ludiones, i.e. dancers and flute-players, were called to Rome in 364 in order to help with their ceremonies to ward off a pestilence, such buffoons must have been among them. They certainly were much more frequent in Italy than in Greece. The best mimes came from southern Italy, such as those portrayed in Xenophon's Symposion: a boy and a girl accompanied by a fluteplayer present in a wealthy house dances and acrobatic feats. The girl is performing somersaults in and out of a circle of knives, a trick also pictured on a hydria from Nola in Naples and on Gnathia vases from southern Italy. This is one of the roots of the mime, in which women had to take the female parts, because it was played without masks, and therefore from the beginning women had a prominent part in it. The girl in Xenophon plays Ariadne with a boy playing Dionysos. While in Greek countries the mime was confined to private houses, in Rome it became a public performance from 173 B.C. on, as the chief play on the Floralia. Female mimes are, therefore, often mentioned in literature, as a scurra mima by Cicero (Phil. ii, 24, 58, and viii, 9, 26), who performed in the interludes and exodia. Aulus Gellius (Noctes Atticae i, 5, 3) makes Torquatus compare the orator Hortensius not to an actor, but to a well known mimic dancer Dionysia, whom he calls gesticularia and saltatricula. I could think of no better description of the statuette of Mr. Friend, with her lively movement combining vivacious gestures and dancing.

In late Hellenistic and Roman times the best mimes came from Syria, i.e. the country where our statuette was found. Many mimes lived at the court of Antiochos IV (187–163), who liked to mingle and dance with them. Among those at the time of Alexander Balas of Syria (152–147) there was a female mime also. She captivated the Epicurean philosopher Diogenes to such a degree that he gave her a purple dress and a golden wreath granted to him by the king. Sometimes part of the troupe, and even the whole troupe and the director of the troupe of mimes who came to Rome were female. Marcus Antonius had a love affair with a mime Cytheris, Domitian with the mime Thymele, Lucius Verus brought flute-players, and mimes from Syria

¹ A. Dietrich, *Pulcinella*, 1897; H. Reich, *Der Mimus*, 1903; Horowitz, *Spuren griechischer Mimen im Orient*, 1905. Cf. also G. Richter in *AJA*. 1913, pp. 149 ff. and Ernst Wüst, in Pauly-Wissowa, *RE*. xv, 1727 ff. s.v. *Mimos*.

² F. Weege, Etruskische Malerei, pls. 90, 94–5; P. Ducati, Storia dell' Arte Etrusca i, p. 225 f.; ii, pl. 7, 9. Poulsen, Etruscan Tomb Painting, p. 12 f., figs. 4–6.

³ Altheim, Archiv für Religionswissenschaft 27, 1929, pp. 35 ff., pl. I.

⁴ Bieber, JdI. 32, 1917, p. 63, fig. 33; Bulle, Festschrift für Loeb, p. 28, figs. 14-15.

⁵ At about the time when the symposion described by Xenophon was supposed to have taken place, a little vase in the collection Vlastos shows a mime dancing a caricature of the hero Perseus (Caputo in *Dioniso* iv, 1935, figs. 1–5; Bulle, *SAMünchen* 1935, pp. 50 ff., pl. V).

⁶ Aulus Gellius i, 5, 3: non iam histrionem eum esse dicit sed gesticulariam, Dionysiamque eum notissimae saltatriculae nomine appellaret. Her income was 200,000 sesterces: Cicero, pro Roscio, 8, 23.

⁷ Polybios, 30, 26; Diod. 31, 16, 2 ff.; Athen. 195 F and 211 A-D.

⁸ Cicero, Phil. viii, 9, 26. CIL. vi, 10109. Cf. 10107-8, 10110-11; xiv, 2408; Anth. Pal. ix, 567.

^o Cicero, Phil. ii, 24, 58; ad Fam. ix, 26, 2; ad Att. x, 16, 5.

¹⁰ Juvenal, i, 36; vi, 44, 66.

and Alexandria to Rome, when he came home from the Parthian war. A tombstone of about the same period praises a mime, Eucharis, as the first woman to appear on a Greek stage, which probably until then had been shut to the female mimes. Still in the sixth century A.D. the best mimes came from Tyrus and Berytus, i.e. Beyrouth to Rome.

The best known female mime is Theodora who, as Procopius tells us,⁴ was not an ordinary flute-player and dancer, but shared the performances of the mimes in their buffoonish acts. She was unusually clever and full of gibes. In her favor the emperor Justinus amended the law that a man of ancestral rank could not marry a courtesan, and thus his nephew Justinianus could make her his wife and a queen in 527 A.D. Vittiges reproached the Romans for exchanging the power of the Goths for Greeks, although nobody of Greek race had come to Italy except actors and mimes.⁵

Greek mimes, and among them outstanding female mimes, thus are to be found from the classical to the late Roman period. It is well known that the mimes were the only actors who survived the end of the Roman empire. The buffoon has survived the middle ages, the Elizabethan stage, and still today he is the Pulcinella and Arlecchino of the Italian stage, the German Kasper, the English Punch, the Turkish Karagös, and the clown of our circus, even including such details as the chequered centunculus, in gay and contrasting colors, the scalloped jacket, the high-peaked dunce cap, the clapper and the bells.

Why has this figure had such a lasting appeal? I think there are two main reasons for it. One is the love for the dance, strong gesticulation, jokes, and rhythmical music, which made the mimes together with all kinds of jugglers, jesters, buffoons, acrobats, and fools endure and survive with their old jests and somersaults through the ages. The lower kinds of plays are always more conservative and persistent than the better ones.

The other reason which, however, probably holds good only for antiquity is the religious connection of the mime. He belongs in the circle of Dionysos just as well as does the actor of farce and comedy. The girl who in Xenophon's *Symposion* turns somersaults, also acts Ariadne in her sacred wedding with Dionysos. On a sarcophagus in the Vatican a man wearing a dress covered with many bells is dancing in the bacchic thiasos. The "Beautiful old men" (Kalogeroi, καλογέροι) in the Carni-

Expositio tot. mundi geogr. 32 (Geogr. Lat. min. 111R).

⁵ Procopius, The Gothic War iv, 27, 38. Chambers, Mediaeval Stage i, pp. 22 ff., 68 f., 373 ff.

⁷ Chambers, op. cit., p. 384; cf. the fools' frontispiece, 2.

A. Greifenhagen, Eine attische schwarzfig. Vasengattung und die Darstellung des Komos im 6. Jh.,

1929, pp. 57 ff.

¹ Julius Capitolinus, Verus, 8, 7–11. ² CIL. vi, 2, 10096; Graeca in scaena prima populo apparuit. ³ Procopius, De Bello Goth. i, 18, 40 = Loeb. ed., iii, History of the Wars v, The Gothic War, p. 183;

⁴ Procopius, Anecdota or Secret History ix, 1 ff. tells the story of Theodora's youth at full length. Cf. Charles Diehl, Théodora, impératrice de Byzance, 1904, reprinted 1938, and Byzantine Portraits, transl. by Harold Bell, 1906, pp. 49 ff.

⁹ Espérandieu in Daremberg-Saglio, Dictionnaire des Antiquités v, 625, s.v. tintinabulum; Wolters, Beiheft für Usener zum Archiv für Religionswissenschaft viii, p. 18, Anm. 14; Zahn, Antliche Berichte aus den Berliner Museen xxxv, 1913–4, p. 85 f., fig. 43 (bell from Syria) and xxxviii, 1916, pp. 50 ff. Amelung, Skulpturen des Vatikanischen Museums ii, pp. 313 ff., Cortile del Belvedere, Nr. 102, 1, pl. 24. Cf. also the relief of a juggler with snakes, who is covered with bells, in the Loggia scoperta No. 10: Amelung ii, p. 732 f., pl. 82.

vals of Thrace and Skyros, in which so many elements of the Dionysiac cult survive, also wear bells.¹ Their tingling is not only pleasant, but serves to avert evil spirits. A similar idea made the Etruscans perform dances at their funeral games and paint the dancers and the "Pulcinella" on the walls of their tomb chambers. The same idea made the Romans call the Etruscan mimes to help destroy the evil spirits of epidemic disease. It is a parallel to the development of Greek comedy from the cult of Dionysos. But there is a very characteristic difference! Greek comedy develops from a gay Dionysiac festival. The Etruscan Phersu is a parallel to Charon, whose mask was later given by the Romans to the man who had to remove the fallen gladiators from the arena. Phersu held at the bloody funeral games a dog on a leash and made him fight a man whose head was covered by a sack. When the prisoner freed himself Phersu was obliged to run for his life.² Thus the Roman mime developed from gloomy and brutal athletic fights. It was, however, later blended with the mime of Greek southern Italy and developed a happier mood.

The dating of the mima saltatricula is difficult because of the permanent life of the type. It is clear that the figure belongs to the time of the Roman emperors. A date around 200 a.d. to me seems best, as this is a period of prosperity in Syria and a time of close relations between Syria and Rome and also a period in which the mimes seem to have been extremely popular. Among bronzes I have not been able to find exact parallels. The Alexandrine dancers of which we have several examples, are absolutely different. The only parallel I have found is a stucco relief with a dancer from Ktesiphon, now in New York, which, however, also cannot be definitely dated.

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¹ Dawkins, JHS. xxvi, 1906, p. 193 f., fig. 3 and p. 202, fig. 9.

² Cf. notes 2-3 p. 642. Altheim, a.O., p. 51 f.

³ W. Lamb, Greek and Roman Bronzes, pl. lxxix, 1-2; Wulff and Volbach, Spactantike Stoffe, pp. 7-9, pls. 5 and 44 b.

⁴ Heinrich Schmidt, Syria 15, 1934, p. 15, pl. iv D-C.

PSIAX

To the Würzburger Festgabe für Heinrich Bulle, 1938, Walter H. Gross has contributed an article entitled "Menonmaler und Psiax" in which he doubts the correctness of the equation The Menon Painter = Psiax (proposed by me in the American Journal of Archaeology xxxviii, 1934, pp. 547 ff.). In his opinion the two artists are closely connected, but not identical. As the issue is important and as time spent with the Menon Painter is time well spent, I should like briefly to answer Mr. Gross' arguments.

Our certain knowledge of the vase painter Psiax is derived from his two signed alabastra in Karlsruhe and Odessa with their four figures—warrior, archer, castanet player, athlete. Whether the two kylikes in Munich and New York, which merely bear the name Psiax without a verb, are also by him (as Gross believes) is debatable, and they are therefore better left out of the argument. Gross agrees that between the four figures certainly by Psiax and the figures attributed to the Menon Painter the similarities are many and striking, both in style and technique; but he also finds differences important enough to preclude the identity of the two artists. Since our disagreement is confined to these "differences," I shall limit my discussion to them.

P. 62. Gross thinks that the warrior by Psiax on the Odessa alabastron looks sketchy (wirkt skizzenhaft) when compared with works by the Menon Painter: "Nirgends finden sich bei diesem (i.e. the Menon Painter) so knappe, fast flüchtige Angaben der Rippen und der Bauchmuskulatur. . . . Die Innenzeichnung des Hopliten vom Odessaer Alabastron dagegen, mit den geraden, etwas harten Strichen, scheint bezeichnend für Psiax zu sein, denn sie kehrt bei dem Palästriten des Karlsruher Alabastrons [by Psiax] wörtlich wieder."

I suspect that Gross used the half-tone illustrations in my article and has been misled by them. The only photograph I could procure of the Odessa warrior is dark and obscure and the half tone (my pl. XXXVIII) more so. Lindsley F. Hall therefore kindly redrew the warrior for me—adding the contour of the alabastron to account for the foreshortening of the figures (cf. my fig. 1). As the region of the right shoulder, ribs and abdomen is injured in the original, he could only reproduce what he actually saw in the photograph, and his rendering of these details is therefore sketchy. But the sketchiness is Mr. Hall's, not Psiax's. The sketchy character of the anatomical details in the Karlsruhe athlete is likewise confined to the illustration (cf. my fig. 3, right). In the photograph one can see that the glaze lines have partly flaked off and that the original rendering was more detailed and precise.

Pp. 62-63. Gross thinks that the most conspicuous difference between Psiax and the Menon Painter lies in the quality of their line: "Psiax führt seine Linien in der gleichen Stärke von Anfang bis zu Ende durch und wechselt auch innerhalb einer ganzen Figur nur wenig; der Strich ist im Ansatz nicht anders als in der Mitte oder zum Schluss. Demgegenüber ist der Strich des Menonmalers viel gefühlter und durchgebildeter, er wechselt Stärke und Betonung."

But is it really true that Psiax's line is uniform throughout? Let us take one specific instance. The line marking the right lower boundary of the abdomen of Psiax's athlete is thinnish at the start, then thickens as it travels downward, then becomes thinner, and ends fairly thick. If we place side by side photographs of two comparable figures—Psiax's castanet player and the Menon Painter's Artemis in Philadelphia (the latter must be full size)—we shall note that the lines of the folds are similar in character.

P. 63. Another difference which Gross notes between the two artists is in the finish of their execution. "Wo fänden sich bei Psiax so detaillierte Angaben der Gewebestruktur des Chitons, wie sie der Menon-maler am Oberkörper seiner Mänade mit feinen, leichten Linien in den Ton eingegraben hat? Oder wann hätte er den Kopf bzw. Haarumriss des Frauenhauptes mit solch miniaturhaft ausgeführten Wellenlinien gezeichnet, wie der Menonmaler? Psiax löst die gleiche Aufgabe mit kurzen, kräftigen Bogenlinien."

But surely there is plenty of minute detail in Psiax's four figures—in the archer's trousers with their variegated stripes, in the elaborate ends of his wreath, in the scale pattern of the lid of his quiver, in the drapery lying on the athlete's stool with its all-over pattern of crosses and delicate zigzag folds, in the stool itself with the tenons carefully marked. And even if the detail is not so profuse as in some works by the Menon Painter it bears comparison with a number of others. For instance, Psiax's archer on the alabastron in Odessa is actually more elaborate than the Menon Painter's archer on the New York kylix.

P. 64. Gross considers the fragment in Leningrad which A. Peredolski attributed to the Menon Painter not by this artist, but by Psiax. He finds the drawing in this fragment grob, lacking in Zierlichkeit, the line fast gefühllos, unlebendig, schematisch. But here again the original is innocent. The indictment must be levelled against the illustration (my fig. 9). This illustration was made, in this one case, not directly from a photograph but from a photostat of a photograph. A comparison between the photograph (which I now have) and the photostat used for the reproduction shows that in the latter the line is thickened and coarsened; the black is intensified, some of the delicacy of the original is lost. It is true that the patterns on the armor are a little thick even on the photograph, but could not a rather full brush account for that? To feel confident of the authorship of the fragment we need only compare the boneless little right hand grasping the spear with the similar hands grasping spear and sword on the warriors of the New York kylix. Contours of knuckles, line of thumb, protuberance at wrist all are identical.

Since the differences which Gross noted between Psiax and the Menon Painter appear to me to be non-existent (and are indeed for the most part due to my inadequate illustrations), I think that we may safely continue to equate the Menon Painter with Psiax.

GISELA M. A. RICHTER

¹ Cf. Richter-Hall, Red-figured Vases in the Metropolitan Museum of Art, pl. I.

THE METROPOLITAN MUSEUM OF ART

AN ANCIENT ORIENTAL SOURCE OF CHRISTIAN SACRED ARCHITECTURE¹

I

We are accustomed to divide early Christian churches which do not belong to the centralized type into two categories: one of these comprises the churches of basilican character, longitudinal buildings terminating in an apse at the end of their axis and divided into an uneven number of naves by parallel rows of columns. This form of building, we are all agreed, originated on the shores of the Mediterranean from the transformation of Hellenistic and Roman prototypes. The other form of Christian church, which is essentially Oriental, consists of a transverse nave and, attached to it to the east, three apses, or rather a central apse flanked by two side chambers, as in the Syrian basilica. This type occurs in Northern Mesopotamia, in Kommagene 2 and in the cave churches of Cappadocia,4 whence it seems to have found its way into Moscovite Russia of the sixteenth to seventeenth centuries. There are two irregular early examples in southern Syria. Of the extant Christian buildings of this type none seems to antedate the fifth to sixth centuries, although the plan had its roots in pre-Christian modes of building. The earliest specimen was found in the Hellenistic temple of Artemis Nanaia in Dura, which, apart from the question of vaulting, differs from its Christian successors only by allowing the two side chambers to communicate with the sanctuary, but not with the nave. As in Roman times the said plan became popular in Arabia Petraea, it may be regarded as Syrian,

¹ This article is meant to be no more than a survey of the history of one particular type of architecture. Other types, whatever their importance may have been, are mentioned only if adducing them contributes toward the clarification of my main theme. I owe a great debt of gratitude to Prof. Valentin Müller, without whose profound knowledge of early Oriental architecture the part dealing with the early specimens of the type could not have been written. Prof. Müller, in an article of which I was allowed to read the first draft, will explain the fundamental types of early Oriental architecture and their mutual relationship.

² Mar Gabriel. See G. L. Bell in J. Strzygowski and M. v. Berchem: *Amida*, Heidelberg, 1910, fig. 154; Mar Jakub in Salah, *op. cit.*, fig. 159, and the domed church el Hadra in Khakh, *op. cit.*, fig. 204.

³ Surg Hagop. See S. Guyer: "Surg Hagop, eine Klosterruine der Kommagene," Repertorium für Kunstwissenschaft, Berlin, 1912.

⁴ Qouchlouq of Qeledjlar. See G. de Jerphanion, Une nouvelle province de l'art byzantin: Les Églises rupestres de la Cappadoce, Paris, 1925–34, i, pl. 43, and chapels 3 and 6 in Gueurémé, op. cit., pl. 28.

⁵ G. Brunoff: "Ueber den Breitraum in der christlich-orientalischen und der altrussischen Baukunst," MJb. i, 1927, p. 56 and fig. 12. Similar tendencies earlier in St. Sophia in Kiev, op. cit., fig. 1.

⁶ Il-Asim and Il Über. See H. C. Butler: Early Churches in Syria, Princeton, 1929, fig. 119, 11 and fig. 120. For Der Idj Djuwani see op. cit., fig. 121. In Der Idj Djuwani and Il-Asim there is a narthex before the chapel, which is approached from the side. Pure transverse rooms are usual in Syrian house architecture.

⁷ F. Cumont, Fouilles de Doura-Europos, 1922-23, Paris, 1926, p. 169; P. Baur, M. Rostovtzeff,

M. Bellinger, The Excavations of Dura-Europos, New Haven, 1932, pl. 4.

⁶ For instance, Kasr Firaun in Petra. See H. Kohl, Kasr Firaun in Petra, Leipzig, 1907, fig. 2; Kasr Rabba, R. E. Brünnow and A. v. Domazewski: Provincia Arabica, Strassburg, 1904–09, i, fig. 35; Is-Sanamen, H. C. Butler, Ancient Architecture in Syria, New York, 1907–20, 2 A, p. 316; Slem, H. C. Butler, op. cit., 2 A, p. 356; Temple of Zeus in Kanawat, see H. C. Butler, op. cit., fig. 315.

particularly since the triple apse was an early feature in Palestinian and Cypriote buildings.¹

Both the longitudinal and the transverse type have this in common, that they are conceived and carried out as strictly axial, that their line of symmetry is identical with the path laid out for the approaching visitor. In the Mesopotamian church this path is usually obstructed by the forbidding walls of the inaccessible altar room, before which the worshippers have to arrange themselves in the transverse hall, in static rows, facing the sanctuary. In the basilica the experience is the more dynamic one of being accompanied and guided by two series of columns on the way towards the presbytery. In both cases the plan does not compel the visitor to deviate from his straight path and the orientation of worship determines also the situation of the entrance door.

What about those longitudinal churches the frontal porches of which are replaced by entrances pierced through one of the side walls, thus forcing the visitor to turn through a right angle when trying to approach the altar? These churches have always been regarded as too irregular to constitute an independent type and it was thought that they owed their existence to a compromise. Leroux, in his book on hypostyle buildings,³ considered it probable that the side entrance originated when architects reared in the tradition of the basilican plan found it incumbent upon them to come to terms with their Oriental environment. Without giving up the longitudinal direction of the nave, they shifted the entrance to one of the side walls, thus outwardly maintaining the semblance of a transverse room. Following Leroux's theories one would, however, not be prepared to find that the purely transverse type very rarely occurs in Christian Syria. Tafha⁴ is a compressed basilica rather than a transverse room, while in this very region the longitudinal plan with the side entrance is not only frequent, but also one of the earliest forms of Christian architecture. Leroux's theory also fails to explain why the exclusive use of the side entrance should have been restricted, as it was in the beginning, to buildings of only one nave. For if it really was the three-nave basilica, which after having been brought to the Orient, was there transformed to suit popular preferences, then it should also be in the same sort of building that this transformation would first be observed. Finally the explanation by compromise is ambiguous, since nothing can keep us from assuming, as in fact was done, that Orientals trying to conform with Hellenistic building practices would arrive at very much the same plans as their western neighbors; as a result we should arrive at the absurd idea that the plan in question resulted from Orientals and Greeks meeting halfway in a friendly contest of mutual generosity.

While we must thus reject artistic compromise as a general principle of explanation, we may find better ground in considerations of cult practice. The Christians

¹ A. Westholm, The temples of Soli; Studies of Cypriote art during the Hellenistic and Roman Periods, Stockholm, 1936, figs. 59 and 60 ff. For the earlier Palestinian examples, see A. Westholm, op. cit., pp. 156 ff.

² G. Brunnow, op. cit., p. 48.
³ G. Leroux, Les Origines de l'édifice hypostyle, Paris, 1913.

⁴ H. C. Butler, Early Churches in Syria, Princeton, 1929, fig. 17.

⁵ H. Glück, "Der Lang und Breithausbau in Syrien," Beiheft 14 der Zeitschrift für Geschichte der Architektur, Heidelberg, 1916.

formed a cult community, every member of which had access to the interior of places of worship. As a result the problem arose of proper admittance of a crowd, which, in a period of spreading faith, must often have packed a none too large local chapel. It is evident that, in order to avoid the thronging of the incoming worshippers, it was best to place the entrances in the side walls, and this solution appeared the more urgent, the narrower and more extended the nave was. The arrangement was further necessitated by the habitual separation of the sexes, who, in accordance with early Christian practice, had to stand at different distances from the altars, the men nearer, the women farther from the sanctuary, and it was an easy thought to give each of these bodies its own entrance to the church. In the "Constitutiones Apostolicae" it is recommended, that "ushers should be posted at the entrance door for the men and Diaconissae at the door for the women," in the manner practised at the entrance to ships, where one wants to verify the number of passengers. As is shown here, in a Syrian compilation of the fourth century, the separation of sexes and the disposition of portals were regarded as correlative. It is hardly necessary to point out that the arrangement of two doors, being too decentralized for a western porch, can apply only to side entrances, of which two are often found in early Christian churches. It is also clear that the need for side entrances passed when the church grew in size, particularly when the narrow, one-nave chapel gave way to the spaciousness of an aisled basilica. As a matter of fact, it will often be noted that the side entrance remained the only access to the smaller chapels, when larger buildings had long reverted to purely symmetrical dispositions.

We must thus admit that practical considerations contributed toward the adoption of the side entrance in the early Christian church. It is probable that they were not its decisive cause, however, for nothing compelled the architects to place both entrances in one wall, as was, at an early date, their practice in small Syrian churches.² Two entrances in opposite sides would have equally well served their purpose, as they did in later Syrian buildings³ and particularly in the churches of upper Egypt and Nubia.⁴ Moreover, it is not only small country chapels which are approached by side entrances, for in the Haūran⁵ and in the Tūr Abdin⁶ some of the largest sanctuaries are entered from the longitudinal wall. Above all, and this applies to all previous argument, a deviation from as strict a principle as that of symmetry would never have been permitted to become popular practice had there not been a predisposition toward tolerating the irregular form. In the building of Greek and Roman sanctuaries symmetry was rigorously adhered to, unless a contingency was created by a set of special conditions. Departure from the canonical form, while

¹ Constit. apostol., 2, c., Ivii, edit. Pitra; Juris eccles. Graec. hist. et monum. i, p. 204, quoted in F. Cabrol et H. Leclercq, Dictionnaire d'archéologie chrétienne et de liturgie, Paris, 1925, 2, part i, p. 542.

² See page 660.

³ First in Kalb Luzeh, Kalat Siman, Der Termanin and Ruweha: H. C. Butler, Early Churches in Syria, figs. 193, 100, 98, 208.

⁴ H. Monneret de Villard, La Nubia medioevale, Paris, 1935. Otherwise the entrances in both side walls occur in all the African churches with double apses, in the great basilica of St. Menas, in the basilica Ursiana of Ravenna and in the grave church extra muros in Korykos, Asia Minor: E. Herzfeld and S. Guyer, Meriamlik und Korykos, zwei christliche Ruinenstätten des rauhen Kilikiens, Manchester, 1930, fig. 130.

⁵ Umm-i-Djimal, see p. 660.

⁶ See p. 662.

excusable in the particular case, was justified in a large group of monuments only if it was supported by a firmly established tradition.

T

Let us try to follow the history of this tradition, which, as is often the case in the Oriental world, leads us back into a very ancient past. Like many other architectural types the transverse room with the longitudinal axis was first introduced as a form of private habitation. It offered to its tenant the advantage that his family, when gathered at one extremity of the hall, had a full view of the incoming visitor before he could make a right turn to face his host or enemy. The protection afforded by this device became more effective if the newcomer had to pass through a porch. Even where no porch was added, there was a feeling of remoteness and of seclusion, which probably was valued as an indication of dignified privacy.¹

In what is now Semitic territory the type in question seems to have been the earliest to be used for houses. Akkadian dwellings of the third millennium in Farah, Mesopotamia,² and early dynastic and predynastic houses in Khafāje near Bagdad ³ were complexes of asymmetrical rooms grouped around central courts. Later, in the living quarters of about 2000 in Ur ⁴ and in Neo-Babylonian houses ⁵ all rooms except the reception hall on one side of the court were asymmetrical and the same is true of the throne rooms in the Assyrian palaces of Khorsabad ⁶ and Arslan Tash.¹ In all these palaces the fundamental spatial unit was an oblong room with the door on one side of the longitudinal wall. The type persisted throughout the ages. Even nowadays some of the reed huts and clay houses built by the inhabitants of the swamps of lower Mesopotamia ⁶ retain the age-old, hallowed plan, which has, in other parts of the Near East, been supplanted by more recent forms. The building here consists of only one room, without any secondary additions.

When the hearth was supplanted by a base for an idol, the private residence had become the dwelling of the deity, a temple. This revaluation must have taken place in a very remote past, for even before 3000 B.C., in the Jemdet Nasr period, a temple of this type was built in Tell Asmar (fig. 1, 1). It was a curiously irregular structure,

¹ Beside this, magical deliberations may have played their part, owing perhaps to the belief that evil spirits could not pass around a corner. This assumption alone seems to make it intelligible that an architectural form as aesthetically unsatisfactory as the one here considered could have persisted so tenaciously. I am not able to adduce any direct textual evidence for this theory, but I should like to draw attention to Ezekiel i, 9, where it is said that the Cherubim were not able to turn around, but that they had to go straight ahead in the line in which they found themselves. Since the Cherubim, that is, bulls with human heads, were the typical guards at Assyrian palace-gates, one may be tempted to ascribe the same "one tracked" motion to the ghost against whom they were to defend the palace. This correspondence would be in keeping with all that we know about apotropaic imagery.

² E. Heinrich and W. Andrae, Farah, Berlin, 1931, pls. 5 and 6.

³ H. Frankfort, Third preliminary report of the Iraq expedition of the Oriental Institute 1932–33, Chicago, 1934, figs. 13 and 60. ⁴ L. Woolley, "The excavations of Ur," AJ. vii, 1927, pl. 41.

⁵ R. Koldewey, The Excavations of Babylon, London, 1914, fig. 236.

⁶ Room 7, eighth century. See H. Frankfort, Tell Asmar, Khafāje, and Khorsabad, Chicago, 1933, p. 90 and fig. 57.

⁷ Room 8, bâtiment des ivoires, ninth century, F. Thureau-Dangin, Arslan Tash, Paris, 1931, p. 43. ⁸ W. Andrae, Das Gotteshaus und die Urformen des Bauens im alten Orient, Berlin, 1930, fig. 58; E. Heinrich: Schilf und Lehm, Berlin, 1934, pl. I, e, F.

⁹ The earliest temple of Abu. See H. Frankfort, Progress of the work of the Oriental Institute in Iraq 1934-35, Chicago, 1936, fig. 11.









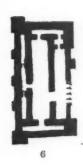










FIGURE 1

- 1. Oldest Temple of Abu, Tell Asmar, Mesopotamia, 4th Millen. B.C.
 2. Archaic Temple of Abu, Tell Asmar, Mesopotamia, 3rd Millen. B.C.
 3. Archaic Temple in Assur, 3rd Millen. B.C.
 4. Temple of Tukulti-Ninurta, Assur, 13th C. B.C.
 6. Palace in Tell Halaf on the Chabur, Middle of 2nd Millen. B.C.
 7. Building K in Sendjirli, Syria, 8th century B.C.
 9. Temple in Mhayy, Arabia (Hellenistic)
 17. Building 48, Binbirkilisse, Lykaonia, 2nd part of 1st Millen. A.D.
 18. Arabic Rest House on the Upper Tigris

with broken outlines, unexpected angles and with the entrance wall bending right into the space of the sanctuary, as if it were intended by this labyrinthine procedure to protect the deity in its far-away corner from profanation by the uninitiated. This earliest temple in Tell Asmar was followed by a series of no less than six different reconstructions (fig. 1, 2), ranging up to the period of the royal graves in Ur, in which, each time, the essential "round-the-corner plan" was faithfully retained. Once adopted, the plan was immune from major modifications and thus we find that a similar series of temples, all built on the same site and according to the same familiar plan, was erected in Nuzi near Kerkuk,2 Assyria. They range from the third millennium to about the middle of the second, when the last structure, built by the Churri, was destroyed by Assyrian war hordes. In the third millennium, in Assur, four temples of Ishtar, all, as it seems, on the same plan (fig. 1, 3), were superimposed upon each other 3 and they were followed in the thirteenth and twelfth centuries by more magnificent reconstructions (fig. 1, 4).4 There were temples similar to those mentioned in Mari 5 on the upper Euphrates, dating from different phases of the third millennium and related in form to the buildings in Nuzi. Finally in Jericho, Palestine, a very ancient little shrine was discovered, remarkable for its great simplicity and for its location far west near the coast of the Mediterranean.

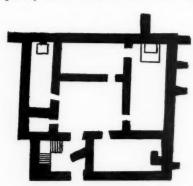


Fig. 2. -No. 5. Fifth Archaic Temple of Abu, Tell Asmar, 3rd Millennium

When, as happened very early, the simple unit described would not suffice to serve the intricacies of the cult, it was, subsequent to the extension of house-plans, enlarged either by the multiplication of the same room within a given precinct or by the accretion of secondary spaces to the central cult chamber. The first procedure resulted in a particular form of the Babylonian court temple, of which early examples, with round-the-corner spaces only, were unearthed at Tell Asmar (fig. 2),7 in Khafāje and in the Sumerian town Tello.9 They do not represent the final solution, for the classical Babylonian court temple has on one side of

- H. Frankfort, op. cit., fig. 4 and Progress of the work of the Oriental Institute in Iraq 1932-33, p. 7.
- ² R. Pfeiffer, "Nuzi and the Hurrians," Annual Report of the Board of Regents of the Smithsonian Institution, 1935, p. 542.
 - 3 W. Andrae, Die archaischen Ischtartempel in Assur, Leipzig, 1923.
- ⁴ The temple of Tukulti-Ninurta, 13th century. See W. Andrae, *Die jüngeren Ischtartempel in Assur*, Leipzig, 1935.
- ⁵ A. Parrot, "Les Fouilles de Mari," Syria xvi, 1935, p. 12 and xvii, 1936, p. 3. For the dating, H. Frankfort, Progress of the work of the Oriental Institute in Iraq 1934-1935, p. 39.
 - ⁶ J. Garstang, "Jericho: City and Metropolis," LAAA. xxiii, 1936, pp. 67 ff. and pl. 41.
- ⁷ The fifth archaic temple of Abu, which is the sixth in historical sequence and the only one with a central court. H. Frankfort, *Progress*, fig. 9.
- ⁸ The archaic early dynastic temple of Sin, which was preceded by a temple with only an outer court. The all-enclosed court is the result of the gradual building up of the different sides of the central enclosure. See H. Frankfort, op. cit., fig. 45.
- ⁹ The temple of Nina, from the time of Gudea. H. de Genouillac, Les Fouilles de Telloh, Paris, 1936, pl. 18.

the court a sanctuary, often with one or two antechambers, all disposed as axially arrayed transverse rooms, with the idol opposite the entrance in the middle of the innermost wall. This arrangement occurs first in buildings of the late third millennium in Ur. 1 Its history may be traced back to very early transverse rooms in the lowest strata of Uruk.² But that, however early its first occurrence, it originated in the transverse room with a longitudinal axis, is made probable by the fact that the sanctuary is frequently lengthened by annexes at the side and that, as in houses, the rooms at the flanks of the court tend to retain their asymmetrical disposition. The transverse room is, therefore, the outcome of a re-orientation of the quasi-longitudinal room, a special case abstracted from the more general class, not its prototype. Its origin may be traced to a desire to show the figure of the deity to those assembled in the courtyard, for the narrowness of the transverse room guaranteed a clear view. There is an element of ostentation in this arrangement, which is at variance with earlier building habits, but which may have been in keeping with the increasing ceremoniousness of the cult. It is for reasons of display that from the second millennium, throne rooms, reception rooms and sanctuaries are mostly disposed as pure transverse spaces.

The court temple was replaced in Assyria, on the upper Euphrates, and in northern Syria, by the simple semilongitudinal room, often amplified by annexes, except where cult pressure from Babylonia prevailed. Side chambers were made parallel to the cult room on the wall opposite the entrance, which reproduced on a smaller scale the form of the sanctuary. They occur in the oldest temples of Ishtar in Assur (fig. 1, 3), in Nuzi and in most of the buildings of the late second and first millennium, when their number is sometimes considerably increased. Often, by a right turn they are allowed to extend into the rear of the wall behind the sanctuary image. The cult chamber itself in the earliest temples of Ishtar at Assur 5 and often in later buildings is divided by a wall screen into an outer and an inner part for the idol and this sanctissimum is counterbalanced by a similar room on the other side of the longitudinal hall, opposite the figure of the deity. Finally a porch is added to the building, which in Assyrian territory consists of a closed wall with one portal opposite the entrance to the cult chamber, to which the structure is longitudinally attached. So disposed the porch occurs in Tukulti-Ninurta's temple of Ishtar in Assur (fig. 1, 4).6 It is foreshadowed farther south in the archaic court temple of Khafāje,7 where of two semilongitudinal sanctuaries with the altars on opposite sides one shrine serves as an entrance hall to the other. The outer room is narrower and shorter than its companion and since both are enclosed in a rectangle, the remaining space is used for a side chamber connected with the inner sanctuary. Possibly the outer room served originally as a porch and was only subsequently converted into a shrine.

In northern Syria the porch, while retaining its essential function, is widened by

 $^{^1}$ The Gig-bar-ku in Ur. See AJ. 1926, pl. 44. Here the side rooms are, however, built according to the round-the-corner plan.

² Stratum 5 and quite articulate in a little room of temple B, Stratum 4B. See E. Heinrich, Seehster vorläufiger Bericht über die von der Deutschen Forschungsgemeinschaft in Uruk-Warka unternommenen Grabungen, Berlin, 1936, pl. 7.
³ Andrae, op. cit.
⁴ Pfeiffer, op. cit.

⁵ W. Andrae: Die archaischen Ischtartempel in Assur, Leipzig, 1923. ⁶ See note 4, p. 652.

⁷ See note 1, p. 652.

the insertion of supports, whether, as in Tell Halaf (fig. 1, 6) on the Chabur, by caryatids, or by columns, as in Tell Tainat on the Orontes,2 or farther north in Sendjirli. With the exception of that at Tell Halaf these buildings are palaces, not temples, and testify to the continued use of the round-the-corner room in secular architecture. In Tell Halaf and Tell Tainat the plan, while still consisting of the same traditional units, reaches a high degree of complexity, which is increased in Tell Tainat by the erection of a second floor. In Sendjirli (fig. 1, 7), where the latest pre-Hellenistic buildings of the type are found, the transition can be observed from an asymmetrical to a symmetrical disposition of the façade, which in the later buildings of the "Lower Palace" 4 consists of two walls of equal length flanking the columnar porch in the middle. Behind them there usually is on one side a chamber, on the other sometimes solid masonry, both of which were perhaps built up towerlike beyond the roof of the porch. It is well known that this arrangement, called (erroneously?) the Beth Chilani, persisted beyond the ancient Oriental period, for it is reproduced in the Hellenistic temples of the Hauran 5 and in Syrian churches of the fifth and sixth centuries. Its form may be due to the influence of Egyptian temple architecture with its pair of pylons, magnificently flanking the entrance to the temple halls. It must, however, be emphasized, that the symmetry of both the porch and the room in its rear, which is characteristic of Hellenistic and Christian buildings, is a late development in the history of the Chilani. In Sendjirli only two of the latest buildings 7 show this correlation between the exterior and the interior, which here gains a purely transverse appearance. In all the other buildings of Sendjirli the older semilongitudinal disposition has been retained for the interior, with the specification that the nave was widened by one chamber on the side of the sanctuary and by several chambers alongside the interior transverse wall.

Looking back upon the development, which has been delineated here, we find the round-the-corner room to be one of the most ancient as well as one of the most tenacious forms of architecture in the ancient Oriental world. To judge from its frequency on the sites so far excavated, it may be regarded as a predominantly Semitic form, for the center of its distribution is found in middle and upper Mesopotamia, countries, which through all the vicissitudes of political fate have always

¹ M. v. Oppenheim, Der Tell Halaf, Leipzig, 1931, p. 74.

² C. W. McEwan, "The Syrian Expedition of the Oriental Institute," AJA. xli, 1937, p. 9.

³ R. Koldewey, "Ausgrabungen von Sendjirli," *Mitteilungen aus den orientalischen Sammlungen* xii, Berlin, 1893, 1898, 1902, 1911; F. Oelmann: "Zur Baugeschichte von Sendschirli," *JdI*. xxxviii, 1924, p. 85; F. Wachsmuth, "Die Baugeschichte von Sendjirli," *JdI*. xxxviii, 1924; "Zum Problem der hethitischen und mittanischen Baukunst," *JdI*. 1931; *Der Raum*, Marburg, 1929, fig. 37.

⁴ Building H3.

⁵ For instance, Kasr Rabba and Slem, see note 8, p. 647. The type has been dealt with by F. Oelmann, "Hilani und Liwanhaus," Bonner Jahrbücher 127, 1922, p. 188.

⁶ In northern Syria, Kalb Luzeh, Der Turmanin and Ruweha, note ⁸, p. 649; in southern Syria, Suweda, J. M. De Vogué, La Syrie centrale, Paris, 1865–77, pl. 124; West church of Umm-i Djimal, H. C. Butler, Early churches in Syria, Princeton, 1929, fig. 114; Π-Karis, Butler, op. cit., fig. 302; Lubben, Butler, op. cit., fig. 40. In northeastern Syria, Kerrata, Butler, op. cit., fig. 169; Marata, op. cit., fig. 85; ir-Ruhaijeh, fig. 113; I'daz, fig. 39; Π-Firdjeh, op. cit., fig. 173. The "Cathedral" in il'Anderin, Butler, op. cit., fig. 170. Asia Minor, Binbirkilisse churches 1, 3, 4, 5, 6, 7, 21, 29, 32, 34, 42, W. M. Ramsey and G. Bell, The Thousand and One Churches, Aberdeen.

⁷ Building H3 in the lower palace and Building ABGD in the upper palace (seventh century), the second with symmetrical sidechambers, the first, as indicated, with a concrete tower on the right.

retained a strong Semitic stock. Perhaps Semitic waves brought it to Sumer, where it was, however, obliterated after the third millennium. In other countries the type is rare. A few scattered examples went astray as far as the island of Crete, where the plan of the earliest temple in Tell Asmar is repeated in a neolithic and an Early Minoan house. The plan may have passed to the island through Syria, but possibly also through Asia Minor, if one may judge at all from buildings erected later in the center of the peninsula. For, contrary to the usual point of view, it must be emphasized that the Hittite temples of Boghazköi,2 notwithstanding the unique organization of their building-blocks, are composed nearly entirely of semilongitudinal rooms. Not only are all the chambers, which flank the court on four sides, built in the fashion described, but the same is true of the sanctuary. It is interesting to see that this sanctuary can never be reached directly from the colonnade or from the rooms in front of it, but that the visitor has to make a detour through a series of rooms turning away and returning looplike to the shrine, which is his goal. There is this difference from the court temples of Babylonia, that the rooms in Boghazköi all radiate from the central court, while in Mesopotamia they surround it by sharing with it one of its longer walls. The result is, that in order to preserve the asymmetrical disposition of the entrances, the rooms in Boghazköi, with only a few exceptions, have no direct communication with the court and form a succession of interconnected apartments. The source of this unusual arrangement is unknown, but it may well be that the architect tried to combine with the round-the-corner room, which had come from the south, the longitudinal room of the megaron type, to which his nordic countrymen were accustomed. In much later times, perhaps in the period of Persian domination, the round-the-corner room occurred in the rock graves of Paphlagonia (fig. 3, 8),3 which show, behind a broad colonnaded front, a narrower room with one or two sepulchres. Since artificial caves usually assume the form of houses built above ground, it may perhaps be inferred that the semilongitudinal mode of building had by then found its way even to the north of Anatolia.

Ш

So far we have followed the fate of the semilongitudinal building in pre-Hellenistic times, when the great native tradition lived undisturbed by foreign artistic conceptions. What became of it in the centuries of Greek domination? On the Syrian coast Greek forms now reigned supreme. To Assur a nomadic wave had brought the open

¹ A neolithic house in Magasa, G. Leroux, op. cit., p. 104 and the Ossuarium of Kastri, Middle Minoan, Leroux, op. cit., p. 105.

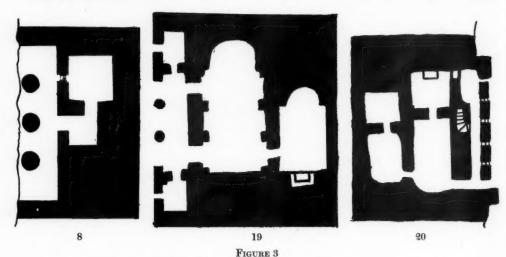
² Fifteenth to twelfth century. O. Puchstein, *Boghazköi: Die Bauwerke*, Leipzig, 1912, pls. 32 and 42 ff. and K. Bittel, *Die Ruinen von Bogazköi*, Berlin, 1987. The altar in temple I is still preserved in its original place before the short wall, while in temple 4 it has been moved from its place.

³ Karagojonlu and Salarköi, probably about the middle of the first millennium B.C.: R. Leonhard, Paphlagonia, Reisen und Forschungen im nördlichen Kleinasien, Berlin, 1915, fig. 94 and fig. 90. In the first of these caves the grave chamber contains a sepulchre at the back and a niche in the left wall; in the second the sepulchral chamber is entered through a short tunnel, which turns to the left. The semilongitudinal arrangement is not preserved in its purity. The same is true of the third cave in Kastanuni (Leonhard, op. cit., fig. 86), which has a semilongitudinal room behind the anteroom, with a niche in one of the short walls, but beside this, extending to the left from the anteroom, a sepulchral chamber, the first of a series of interconnected apartments stretching out along the wall of the rock.

Liwan, which during Parthian times displaced the native form, here as well as in neighboring Hatra. In Dura, on the borderland between Syria and Mesopotamia, the Babylonian court house with transverse rooms was now universally favored, unless a divergent plan was forced upon the architect by the cult tradition of the community for which he was building. The transverse room spread to the Arabia Petraea.

There survive, however, in Syria and Arabia a few semilongitudinal rooms, which, although scarce, show that the plan had not lost all of its appeal to the people of the Semitic countries.

In the Hauran the Karavanserai of Dêr Suîedi 4 consists of a one-nave build-



- 8. Rock Grave Karagojonlü, Paphlagonia, middle of 1st Millen. B.C. 19. Rock Grave in Surg-Garabad near Caesarea, Cappadocia, 2nd part of 1st Millen. A.D. 20. Cave Church in Duri, Kurdistan. Date uncertain.

ing outwardly attached to an enormous colonnaded court. The interior, which is accessible only from the court, is, like most buildings in the Haūran, divided into bays by transverse arches. There are two doors, both on one extremity of the longitudinal wall. Since the last of the arches in the nave is narrower than the rest, it appears that the bay thus emphasized was meant to be given prominence, originally perhaps as the seat of the market inspector, later, when the Christians availed them-

- ¹ W. Andrae and H. Lenzen, Die Partherstadt in Assur, Leipzig, 1933.
- ² W. Andrae, Hatra, Leipzig, 1908 and 1912. ³ See note 7, p. 647.
- ⁴ H. C. Butler, Ancient Architecture in Syria, New York, 1907-20, 2, fig. 317. It is probable that the so called "Kaisarijeh" of Shakka belongs to the same group, although the plan drawn by De Vogué and reproduced by H. C. Butler (Early churches in Syria, fig. 4a) does not render this certain. Unfortunately the distinction between windows and doors is, as in so many ground plans, not clearly made and the scanty description in the text does not substantially help to make the plan more intelligible. It does seem, however, that, beside the entrance or entrances from room C there were others leading directly into the main room B from the left, as well as from the right longitudinal wall. Even if, as I think, opening a in one of the short walls can be interpreted as a window, the room seems not to be a pure semilongitudinal structure.

selves of the building, as the place for the altar. The incoming visitor was obliged to turn right in order to reach his goal.

A second building of our type seems to be preserved in Mhayy (fig. 1, 9),¹ in the Provincia Arabica. Domazewski, who first saw and described the ruins of the temple, was puzzled by the narrowness of its nave, which seemed to be irreconcilable with the customary position of the idol opposite the sanctuary entrance. His difficulty is cleared away when it is understood that the building was not intended to be symmetrical and that the idol stood at one of its narrow ends. There is nothing to oppose the view that the wall screen, which now divides the room near its central transverse axis, was one of its original features, since it is closely paralleled in earlier Oriental buildings like Sendjirli. Since of the two staircases postulated in Domazewski's reconstruction only one was found in the actual remains, it may well be that even the

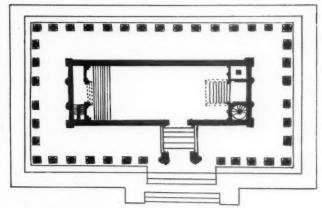


Fig. 4.—No. 10. The Temple of Bel at Palmyra, Beginning of 1st C. a.d.

exterior was not symmetrical and that, as in some churches in northern Syria,² a colonnade was attached to a tower-like structure in one corner. The exact position of the entrance has not been determined, though it probably was, as in Sendjirli, in the middle of the transverse wall.

The main Hellenistic example of the semilongitudinal room is the chief sanctuary in Palmyra, the temple of Bel (fig. 4, No. 10).³ Placed in the middle of an enormous colonnaded court, it appeared as a pseudoperipteral temple of classical forms with magnificent Corinthian columns. But while the true Greek temple, like the Megaron from which it sprang, is entered longitudinally at one of its narrow ends, this building was approached through one of the lateral peridromes, by a huge built-up porch, which was in line with the door of the cella and with the propylaea in the wall of the temenos. The entrance was not in the middle of the transverse colonnade; it was situated nearer one of the corners, and as a result, since the porch filled two of the fourteen intercolumniations canonical in the pseudoperipteral temple, eight columns

¹ R. E. Brünnow and A. v. Dommazewski, op. cit., 1, fig. 67.

³ From the time of Augustus or the last period of the republic: Th. Wiegand, *Palmyra*, Berlin, 1932, pl. 71. For the date, op. cit., p. 139.

were placed to the right and six to the left of the portal. The semilongitudinal arrangement of space, which we are led to expect from such a disposition of the exterior, is not strictly observed in the interior. There are two sanctuaries opposite each other at the narrow ends of the cella, devoted, it seems, to the male deity and his spouse. But that this disposition does not differ in principle from the forms of building hitherto considered, can be easily observed from the very unequal emphasis given to the two adyta. The shrine to the north excels that to the south in prominence, orientation and decoration, for a flight of steps higher than that on the other side led to a shrine situated toward the north, like all the other sanctuaries in Palmyra. It was, unlike the one on the other side, richly adorned with figure reliefs and contained a room for the preparation of sacrifices. Since it was, furthermore, placed at a greater distance from the asymmetrical porch, like the cult images in ancient Oriental temples, nobody could have any doubt about the prominence of this part of the temple over the other. For the present observer the temple of Palmyra is a round-the-corner room with an accessory center opposite the main focus of the building.

IV

Following the succession in time, we return to a consideration of Christian church architecture, from which this inquiry started and bring to this task the knowledge that the semilongitudinal room was favored in exactly those regions which witnessed the first expansion and intense development of Christianity. Its fundamental simplicity must have made it very acceptable to the Christian builders, who, in the centuries before Constantine, could not think of erecting costly constructions. No doubt the first Christian gathering-places were rooms of one nave, which, only after the conversion of some of the wealthy, were sometimes replaced by splendid private basilicas. It would, however, be wrong to think that these oratories in the late second and third centuries were only recondite and rather obscure rooms in the private mansions of those who dared risk discovery. In the breathing spells between the persecutions the Christians ventured to come out into the open, to rent public buildings and even to build their own, as they could well do, since the spells of oppression were often local and always intermittent.

How did these buildings look? There is nothing left of pre-Constantinian churches in the east or, rather, we are unable to distinguish them, if any still exist, from buildings erected some decades later, after the peace of the Church. Only one building, though belonging to the category of the domestic church, may afford us some indirect knowledge about the first phase of Christian architecture and perhaps also about the esteem in which the round-the-corner arrangement was held among Chris-

¹ Temple of Baal Shamin: Th. Wiegand, op. cit., pl. 62; the "Corinthian" temple: Th. Wiegand, op. cit., fig. 56.

² For the records of pre-Constantinian churches see the complete compilation of literary material in F. Cabrol and H. Leclercq, op. cit., 4, 1921, p. 2279, s.v. églises.

³ The pre-Constantinian date 221 A.D. proposed by H. Vincent for the basilica of Emmaus has not been successfully established. See H. Vincent et P. Abel: Emmaus, sa basilique et son histoire, Paris, 1932. There is more certainty about pre-Constantinian buildings in the west, from Dalmatia and Istria. About these (Oratorium of Maurus in Parenzo, basilica of Theodorus in Aquileia) see W. Gerber, Altchristliche Kultbauten Istriens und Dalmatiens, Dresden, 1912, fig. 40, and Jahrbuch des kunsthistor. Instituts d. k.k. Zeutralkommission 1905, pp. 140 ff.

tian architects. The little chapel in Dura (fig. 5, No. 11) ¹ occupies only a small chamber in a well-to-do Babylonian court-house. Opposite, in the same court, there is a second larger room, which, likewise, was devoted to a sacred purpose, if it is right to interpret the platform in it as the pulpit for the Christian preacher. It was obtained by fusing two chambers in one and may have been built somewhat later than the chapel. Now these two rooms differ from all the sanctuaries used for the manifold cults of Dura by being disposed not transversally, as was the general rule, but longitudinally with the entrances sideways from the court and from one of the lateral chambers. It is doubtful whether the round-the-corner rooms thus created reproduced a definite spatial type or whether they were expedients due to a compromise between the existing plan and the exigencies of the site available. It may be argued that the necessity of hiding the refuge of a sect not legally admitted prompted the owners of the house not to use as a shrine the transverse reception room in the rear, but a small room in the corner which would be less likely to attract unwanted notice. Since the

walls of the room were adorned with Christian frescoes, such precaution would obtrude itself to those responsible for the welfare of the little community. But this argument hardly holds, since it fails to explain why the spatial form adopted for the little chapel should have been reproduced later in the oratory, the position of which—opposite the entrance to the house—gave it an entirely different function. The builders, being aware of the dangers inherent in the situation, avoided all Christian imagery in this room, but they gave it the same form as the earlier chapel. Their intention to follow existing architectural examples becomes entirely clear

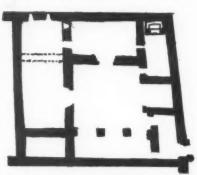


Fig. 5. -No. 11. The Christian Church in Dura on the Euphrates, 3rd C. a.d.

when one considers that they observed the rules laid down later in the "constitutiones Apostolicae" by making each room accessible through two separate doors and this although the painted chapel is much too small to lend itself to such pre-established arrangement. Definite traditions are here reflected, which at this early time must have existed among the builders of Christian sanctuaries,² and of which the origin may be sought in monumental construction much rather than in the makeshift conditions of remodelled houses. Since Dura as a Roman frontier fortress received many cultural inspirations from regions nearer the Mediterranean,³ we may assume that the round-the-corner plan, of which we here find the first Christian example, came to

¹ Probably first part of the third century, The Excavations of Dura-Europos. Preliminary reports of the fifth season of work 1931-32, New Haven, 1934, pl. 39. Another private house transformed into a church (beginning of the fourth century) was discovered in Merida, Spain (I. R. Melida, Catalogo monumental de España, provincia de Badajoz, 1927, pl. 26). The plan is entirely different from that in Dura, since two parallel apsidal rooms are attached longitudinally to a peristyle court.

² That such traditions had been established at this early time, has been shown in connection with the iconography of the frescoes in the church of Dura, *The Excavations of Dura-Europos. Preliminary reports of the fifth season of work 1931–32*, New Haven, 1934, pp. 254 ff. P. V. C. Baur, "The Paintings of the Christian chapel."

³ For Dura's trade relations see M. Rostovtzeff, Caravan Cities, Oxford, 1932, pp. 153 ff.

the town from the more western parts of Syria, whence Christianity itself had been introduced. The existence in Palmyra, Dura's sister-town, of a prominent example of the round-the-corner type may give us a hint as to the route which the plan had to travel on its way to the Mesopotamian border.

It is to western Syria, then, that we must look for the reconstruction of the model for the Dura chapel and there are, in fact, in the country near Antioch small churches of the fourth and fifth centuries which may be reproductions of a much older type. Many of these one-nave buildings are entered through two doors in the south wall and differ from the disposition of the Dura chapel only by the adoption of a semicircular apse, which betrays Roman influence. The entrance wall is given prominence by the addition to it of a colonnade, in which one can recognize the Hellenized successor of the columnar porches in Sendjirli and Mhayy. A little chapel, which is sometimes attached to the southeastern part of the nave, may not be too easily identified with the Diaconicon of the classical Syrian basilica. For while in one of these little churches, in Rbêah (fig. 6, 12),1 the chapel opens, as the Diaconicon should, towards the interior of the nave, it is only outwardly attached to it in the similar building of Kfêr. In Khirbet Hass and in Behyō (fig. 7, 13, p 665), where the southern colonnade is attached to a full-fledged basilica, the latter retains its two regular Pastophoria, while the columns proceed from an independent room, perhaps the substructure of a tower. In Behyō this room is even connected, not with the east end of the church, but with the façade. It seems from all this, that the southern chapel in the one-nave churches of northern Syria was originally not a Diaconicon adapted to the need of a particular plan, but an independent architectural unit derived from the corner rooms flanking the porches in Sendjirli. In Nurije (fig. 6, 14),5 where the simplest of these churches stands, the colonnade is set between two straight walls, by means of which the body of the church is prolonged.

The early importance of the semilongitudinal room as a type of Christian architecture is confirmed by the remains in southern Syria of the one-nave church of Julianos in Umm-i-Djimal (fig. 6, 15). The famous inscription, of 344 a.d., through which this building has become the first dated church preserved unaltered in all Christianity, is set above the middle of three lateral doors, thus emphasizing the south wall, by which they are pierced. There is, as in north Syrian churches, a portico, though it is here composed of pillars instead of columns and confined by a group of monastic buildings, which adjoin the church to the south. A court separates the church from the other structures. The arrangement here delineated is most remarkable, for here we have one of the first examples of the asymmetrical attachment of the monastic establishments to the church, which later was made canonical in the mediaeval monasteries of Europe. It has long been observed that the lateral colon-

¹ H. C. Butler, Architecture and other arts in Syria, fig. 38.

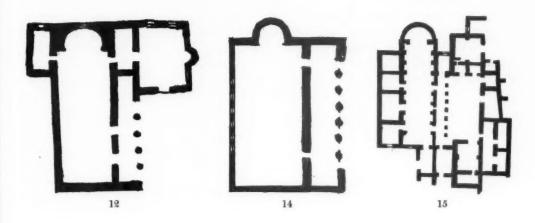
Fourth century. H. C. Butler, op. cit., fig. 58.

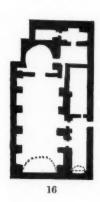
Sixth or seventh century. H. C. Butler, Early Churches in Syria, Princeton, 1929, fig. 149.

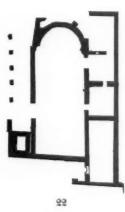
⁵ Fourth century. H. C. Butler, Architecture and other arts in Syria, fig. 30.

⁶ H. C. Butler, Early Churches in Syria, fig. 11.

⁷ It occurs there first in the Carolingian period: in St. Paolo delle tre fontane in Rome, and in the plan of St. Gall. The disposition given to the monastic establishments in Lorsch (originally a private estate consecrated as a monastery in 763: F. Behn, Kirche und Vorhalle des Klosters Lorsch und der Stand der Ausgrabungen, Darmstadt, 1936, fig. 1) makes it probable that this Western plan was partly







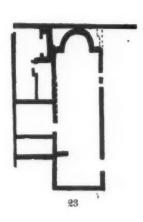


FIGURE 6

- Chapel in Rbêah, Northern Syria, 5th C. A.D.
 Chapel in Nurije, Northern Syria, 4th C. A.D.
 Church of Tulianos in Umm-i-Djimal, Southern Syria. Date, 344
 Mar Azaziel in Kafr, Tur'Abdin, 6th-8th C. (?)
 Chapel in Làgosta, Dalmatia, 5th-6th C. A.D.
 Cemetery Chapel in Ampurias, Spain. 5th-6th C. A.D.(?)

naded court, from which eventually the cloisters developed, was first introduced in Syria, where the church of Babiska ¹ may be cited as an early example. Where the classical influence prevailed, as in the great churches founded by Constantine, or in the monastery of Tebessa in Africa, the atrium had always been set in front. Its removal from the west to the south of the church may now be understood as the consequence of its being attached to a building of semilongitudinal plan.

Of the one-time provinces of the semilongitudinal plan only Assyria has not yet vielded any early examples. The one-nave church in Elif 2 (third to fourth century), like those in Buda 3 and Srir 4 in northern Syria, shows a compromise between the longitudinal and the semilongitudinal form, for beside the door in the south wall there is a larger one in front. Better known than this as yet unpublished building are churches of a later date built in the sixth to eighth centuries, when the influences of Hellenistic art had faded and native forms had gained ground. There is in the Tur' Abdin, beside the buildings with transverse plan which we have mentioned, a group of monastic churches, in which the main features of the Assyrian temple have been faithfully reproduced. Mar Augen, Mar Philoxenos in Midyat, Mar Azaziel in Kêfr (fig. 6, 16), Mar Kyriakos in Arnas and the ruined church of Mar Sovo in Kakh all have in common that the one-nave hall of the church is prefaced by a closed narthex on one longitudinal side, which, as in the ancient Oriental temples, is approached by only one outwardly reinforced door. As in pre-Christian buildings of the region the walls are thick and light is scarce. There have, of course, been changes and adaptations to the Christian cult: instead of the raised platform for the idol there now is a rounded apse; accessory rooms have been added and the main nave is now entered through a double or triple arcade, pierced in the lateral wall. But the similarity to the Assyrian temple is still striking and all the more convincing when one considers that the interior arcatures, which now serve to uphold the barrel vault, may have been added later,10 that the churches originally had plain walls and that they were unvaulted like their pre-Christian models. Perhaps also the double and

evolved from the tradition of the Roman villa with its central peristyle. K. M. Swoboda, Römische und Romanische Paläste, Wien, 1924, figs. 12, 13 and 15 ff. Since, however, the placing of the church on the north side of the cloisters was not foreshadowed in this traditional plan, the arrangement was probably derived from an extraneous source, that is, from semilongitudinal building-plans in the east. At a period roughly corresponding to that of the western buildings in question, the monastery of Mar Augen in the Tur'Abdin was erected (see J. Strzygowski and M. Berchem, op. cit., fig. 174, in which the cloisters serve as a connecting link between two churches). For a final clarification of the architectural history of this and other buildings in the Tur'Abdin, the publication by S. Guyer must be awaited.

¹ H. C. Butler, Early Churches in Syria, fig. 46. The Syrian "cloisters," unlike the European, are, however, never enclosed by colonnades on all four sides.

² Mentioned by S. Guyer, op. cit. I owe to Mr. Guyer's generosity a short description of this plan. A possibly pre-Christian example of the pure round-the-corner plan in Mesopotamia is the double building of Kersifan. See G. Bell, Monasteries and churches of the Tur Abdin and neighbouring districts, Heidelberg, 1910, fig. 2. Two chapels, both with the apses carved in the rock, adjoin. The first is entered through the long wall. The use and date of these buildings is unknown.

³ H. C. Butler, Architecture and other arts in Syria, fig. 39.

⁴ Butler, op. cit., fig. 59. The type is common in Syria. Butler mentions on page 74 of his Early Churches in Syria the chapels near Serdjibleh and Banakfur, of Burdj Hedar, Kasr il-Mudakhkhin and Dauwar, all with western and southern entrances.

⁵ J. Strzygowski and M. v. Berchem, op. cit., fig. 143.

⁶ Op. cit., fig. 196.

⁷ Op. cit., fig. 174.

⁸ Op. cit., fig. 183.

⁹ Op. cit., fig. 187.

¹⁰ S. Guyer, op. cit.

triple entrances to the nave were not intended, since the door nearest the entrance always corresponds, as in Assyrian times, to the outer door of the narthex. To the buildings mentioned there should be added Kilisse el Achmar, a structure of advanced Islamic times, in which two one-nave churches are so combined through a group of small rectangular rooms that both can be entered only by one of their lateral walls.

We finally pass from here to Asia Minor, expecting that its receptiveness toward artistic suggestions from the east would remain unaltered in Christian times. Though the west coast was too deeply under the sway of Greek and later of Byzantine influence to admit more than an occasional example of the Semitic type, this type proved more frequent in the mountainous regions in the center and south, whose affiliations with Syria and upper Mesopotamia were a matter of geographic necessity. Asia Minor presents in Binbirkilisse, Lykaonia, the only known Christian example of the unmodified Chilani scheme (fig. 1, 17)2: alone among structures quite differently planned there stands on that site a little building without apse, which by its open symmetrical porch supported by one pillar and by the semilongitudinal room in its rear elicits immediate comparison with the palaces of Sendjirli. It differs from the older monument only in that the side rooms with the porch have been omitted. A little niche in the narrow end of the anteroom indicates that this part, which is so much more spacious here than in Sendjirli, had an unknown function of its own. Perhaps the building was originally designed to be used as a hostel or inn, like the Arabic rest houses, which the traveller encounters in the region of the upper Tigris (fig. 1, 18): igust like the building in Binbirkilisse they consist of a semilongitudinal room, prefaced by a colonnaded porch, with this specification, however, that a storeroom or stable is here perpendicularly attached to the plan of the other units. Fortresses and castles in upper Mesopotamia may occasionally be built on the same lines.4

In Asia Minor the semilongitudinal plan occurs sometimes in the form of a double sanctuary, with a second shrine paralleling the first on the side opposite the entrance. This is the arrangement of a little building (church?) in Ephesos 5 and particularly of some of the rock churches of Cappadocia (fig. 3, 19, p, 656), 6 through which the pagan

¹ Seventh-eighth century? W. Bachmann, Kirchen und Moscheen in Armenien und Kurdistan, Leipzig, 1913, pl. 18.

² Building 48, of unknown date. See W. Ramsey and G. Bell, *The Thousand and one Churches*, Aberdeen, fig. 189.

³ F. Sarre and E. Herzfeld, Archäologische Reise ins Euphrat und Tigris-Gebiet, Berlin, 1920, 2, fig. 292. According to these authors, rest houses of this form are frequent in the region of Irbil on the upper Tigris. The entrance hall is here used in summer, the main room with its hearth and chimney in winter.

⁴ In the ruins of a castle on the island Zacho in the Chabur, for instance. C. Preusser, Nordmesopotamische Baudenkmäler altchristlicher und byzantinischer Zeit, Leipzig, 1911, pls. 29–32. In this case the Arabic structure rests on an older (Christian?) building, the plan of which is not revealed by Preusser. As it stands now, the castle is surprisingly similar to the Arabic rest houses mentioned.

⁵ J. Keil, "Vorläufiger Bericht über die Ausgrabungen in Ephesos," JOAI. 1926, p. 262, fig. 52. In addition to a small colonnaded portico along the long wall, this double chapel (?) has two western entrances.

⁸ The purest and possibly earliest example is found near Surg-Garabad, not far from the ancient Cesarea in Cappadocia. F. Cabrol and H. Leclercq, op. cit., 6, part 2, p. 2033, fig. 5569. Here the two columns in the entrance and the two side extensions of the porch are similar to the forms known from Paphlagonia. Other Christian cave churches of the type in question are the church of the apostles near Sinassos (M. Jerphanion, op. cit., i, pl. 149), the church of the Forty Martyrs near Sonvech (op. cit.,

tradition of carved-out cave architecture was so spectacularly continued. The easternmost sanctuaries of this type are situated as far afield as Kurdistan (fig. 3, 20, p. 656,),¹ where the use of only one narrow entrance and of a square sanctuary indicates the Assyrian tradition. The rock churches of Cappadocia have rounded Roman apses and often colonnaded entrances, reminiscent of the rock graves of Paphlagonia² and of the buildings of Sendjirli. Sometimes two little chambers on both sides of the porch complete the similarity to pre-Hellenistic north Syrian architecture as well as to the rock-hewn graves of northern Asia Minor.

V

At an early date the semilongitudinal plan had to defend itself against the claim of the Hellenistic basilica. The new western form of church building was so much more magnificent and so much more appropriate to house the larger communities of victorious Christianity that it could not be discarded, even where popular tradition had long become accustomed to the more ancient plan. The result of a compromise between the ancient Oriental and the Hellenistic type was a hybrid form, which, while retaining the three-nave arrangement of the basilica, was given a modified disposition of entrances. The expedient of disposing the portals only on the south side is comparatively rare. It occurs in a number of Syrian churches 3 and seems to have been adopted by builders of mediaeval hall churches in Mossul and Kurdistan,4 where Oriental tradition would easily hold its own against the incoming waves of Hellenism. Scattered examples occur on African ground. The more general feeling was, however, that the western entrance constituted too intimate a part of the basilican scheme to be easily done away with. It often had to yield its focal importance to the entrances on the south side and to serve as a conjunctive opening used by women or chatechumens. Occasionally the lateral porch, the men's entrance, beside being emphasized by a colonnade, would receive a profusely ornamented portal, as in some of the Nestorian and Jacobite community churches of Mesopotamia (fig. 7, 21). But the western entrance survived, despite its having to hold its own against a simple or, as in Syria, a double entrance in the lateral wall. Though this entrance would in some buildings be inconspicuous or fail to maintain

pl. 160), and Balleq Kilisse in Soghanle (op. cit., pl. 160). The use in these buildings of engaged arcades supporting the vault may perhaps be due to Mesopotamian influence. A semilongitudinal chapel with engaged arcades stands above ground in Gelvere, Cappadocia (W. Ramsey and G. Bell, op. cit., fig. 252), another in Viran Sheher (ibid., fig. 254).

¹ W. Bachmann, op. cit., p. 16.

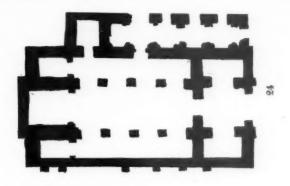
³ Babiska: H. C. Butler, Early Churches in Syria, fig. 46. Dar Kita: op. cit., fig. 48. Kasr Iblisv: op. cit., fig. 53. Burdj Hedar: op. cit., fig. 211.

⁴ For instance, the Nestorian churches of Lizan near Dschulamerk (W. Bachmann, op. cit., p. 18) and Duri (ibid., p. 16). As in many Armenian, Georgian and Greek churches, the naves are here separated by a wall, instead of rows of columns or piers. This is the Oriental idea for the separation of individual spaces.

⁵ The grave churches of Tigzirt: St. Gsell, Les Monuments antiques de l'Algérie et de la Tunisie, Paris, 1901, 2, figs. 139-140; Timgad: op. cit., 2, figs. 145, 146; The churches of Khamissa: op. cit., 2, fig. 127; of Henchir-el-Begueur: Bulletin archéologique du Comité, 1907, p. 340; also St. Salsa in Tipasa, fourth century: Gsell, op. cit., 2, fig. 150. Only the last of these churches has two side entrances in one side.

⁶ This arrangement is too frequent to necessitate the enumeration of examples.

⁷ For example, Geziret Ibn Omar (C. Preusser, op. cit., pl. 34).



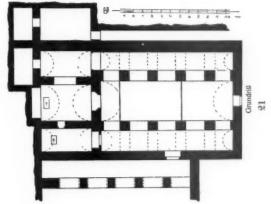


FIGURE 7

- Church in Behyö, Northern Syria, 6th-7th C. A.D.
 Church of Geziret ibn Omar (after Prousser), late centuries of 1st Millen. A.D.
 San Salvador de Val de Dios, Spain, 9th C. A.D.

its position in the center of the wall, in others it would retain its position, which might even be emphasized by a colonnade 2 in front of it or by the setting of two auxiliary portals at its flanks.3 The basilican urge for symmetry would be met by counterbalancing the entrances in one of its side walls by entrances in the other. So deeply, however, was the tradition of semilongitudinal building rooted in Syrian architecture, that even then, when regularity and rhythmical beauty were among the deepest concerns of the artist, the doors in corresponding walls were not set in corresponding places. The architects of the late fifth century, when planning highly representative buildings, were prompted by the exacting magnitude of their tasks to place the side entrances in parallel locations, thus setting an example for later symmetrical planning. Before that time, however, to the entrances on the south side there corresponded on the north either one or two,4 the position of which would purposely be moved beyond the line of symmetrical adjustment. By considering that the conflict of western and of lateral entrances was carried at an early period even into the field of minor one-nave buildings, one sees the great stubbornness with which the native tradition was sustained against Hellenistic symmetrical forms.

VI

Before ending this rapid survey of the history of a forgotten type in architecture, a few words should be said about its expansion into the western parts of the Mediterranean and particularly into western Europe. Nobody will expect to find a continuous series of buildings of one type in regions far removed from its country of origin. The astonishing frequency of the round-the-corner scheme in Europe would, therefore, be inexplicable, had not the gradual disintegration of western tradition in late antiquity laid the way open for the influx of Oriental forms. Rome and Italy, for some time the strongholds of western architectural usage, proved impregnable to the Semitic type. It penetrated only once 5 into the country around the brim of the northern Adriatic, where the symmetrical one-nave chapel with a western entrance had been independently developed. But things were different in western Europe, where there was little native tradition to hold out against the Oriental invasion, or where this tradition would even be suited to meet the newly imported forms. The existence of the round-the-corner type in the pre-Saxon chapels of Cornwall, Kylvan, 6 St.

op. cit., figs. 14, 27, 16 and 41. Sleman: ibid., fig. 56; Der Siman: ibid., fig. 108, to mention some of the examples of the fourth and fifth centuries.

³ Kalat Siman: Butler, op. cit., fig. 100; Der Termanin: ibid., fig. 98; perhaps also Kalb Luzeh: ibid., fig. 193.

⁴ Again the number of examples defies enumeration.

⁵ Làgosta, southern Dalmatia, fifth to sixth century: BullComm. 1934, pl. I. The rarity of the type in this region is astonishing, considering the fact that at the beginning of the fourth century a purely Parthian building was erected in the neighborhood of Salona (R. Egger, "Das Mausoleum von Marusinac und seine Herkunft," Actes du 4. congrès international des études byzantines, Sofia, 1936). This grave building, a longitudinal structure with interior and exterior wall buttresses, became the prototype for a whole series of small churches in the neighborhood, dating from about 1000 A.D., some of which are conceived as round-the-corner rooms. For instance, Zestinja: see J. Strzygowski: Die Altslavische Kunst, ein Versuch ihres Nachweises, Augsburg, 1929, fig. 50 and Spas: op. cit., fig. 52.

⁶ Fifth century. Archaeological Journal 1846, p. 226.

¹ Simkhar: Butler, Early Churches in Syria, fig. 27, but also the church of Julianos in Umm-i-Djimal.

² Churches of Masechos and Claudianos, east and southeast church in Umm-i-Djimal: H. C. Butler, and the fig. 14, 27, 16 and 41. Slowers, ibid. 6g, 26; Des Simon, ibid. 6g, 108, to mention some of the

Gwythian ¹ and St. Madden ² may perhaps best be explained by the fusion of Oriental elements with the Celtic form of transverse building. The same may possibly be said of the little early oratory of St. Symphorien in Nantes, ³ although here and in Xativa, Spain, ⁴ the extreme smallness of the building could have made semilongitudinal planning a matter of practical expediency.

We may quote as close imitations of the Syrian type the chapels in Làgosta, Dalmatia (fig. 6, 22, p. 661), and the cemetery chapel in Ampurias (fig. 6, 23), Spain, both apsidal buildings with several secondary rooms beyond the long wall opposite the entrance. Their derivation from eastern models would be certain, even if Làgosta did not betray its artistic origin by a southern colonnade, which, like that in Beḥyō, Syria, proceeds from a little tower in the southwest. The very elongated shape of the chapel in Ampurias is reminiscent of Umm-i-Djimal in southern Syria.

The favorite province of the round-the-corner room in Europe is post-Visigothic Spain, which, from all appearances, must have received powerful artistic suggestions from the countries east of the Syrian and Anatolian borderland. Buildings like San Salvador de Val de Dios (fig. 7, 24, p. 665) ⁷ share with Mesopotamian churches like Geziret Ibn Omar (fig. 7, 21) ⁸ not only the open narthex on the long side, but also the use of barrel vaults, of broad square pillars in the nave and of three rectangular rooms in the East, neatly separated from the nave, the middle of which projects beyond the line of the eastern wall. Open colonnades before one side porch are as frequent in Spain ⁹ as they are in Syria and Mesopotamia and they occur from the period of the reconquest right into Romanesque times. The side entrance is prominent in small one-nave Mozarabic buildings, ¹⁰ even in square structures like St.

¹ Fifth century. Archaeological Journal 1846, p. 230. The separate square chancel is here reminiscent of wooden architecture. It is frequent in Anglo-Saxon architecture.

² Archaeological Journal 1846, p. 232. All these buildings have walled up benches either around the whole interior (St. Madden) or in part of it (in St. Gwythian they are only in the chancel). They usually have neither chancel nor apse and are thereby reminiscent of very simple domestic architecture. To the same group belongs the (later?) chapel of St. Patrick in Heysham (Baldwin Brown, The Arts in early England, 2, fig. 51. Occasionally the round-the-corner plan occurs in full-fledged Saxon architecture, as at Breamore (B. Brown, op. cit., fig. 141).

³ Bulletin archéologique du Comité 1893, p. 31. Like the pre-Saxon buildings, this little church is a simple rectangle subdivided only by a wall screen at the east end.

⁴ F. Cabrol and H. Leclercq, op. cit., 5, part 1, p. 434, fig. 4164. This curious building with interior wall buttresses, but without apse, has two entrances, one at the corner of the narrow wall, the other in the adjoining part of one of the long walls. The latter door is emphasized by a series of semicircular steps which lead up to it.

⁵ See note 5, p. 666.

⁶ F. Cabrol and H. Leclercq, op. cit., 5, part 1, p. 427, fig. 4157. Of the two widely separated entrances one is subdivided by a pillar "trumeau", a motif of north Syrian or Anatolian origin. See p. 654.

⁷ With inscription of 893; Lamperez y Romea, *Historia de la Arquitectura christiana Espanola en la edad Media*, Madrid, 1908, 1, fig. 104.

⁶ See note 7, p. 664.

⁹ San Miquel del Escalada, 913 A.D.; Lamperez y Romea, op. cit., fig. 104; San Salvador de Priesca, 921 A.D., ibid., fig. 175; The one-nave churches of Santa Maria de Tarasa, 1112 A.D.; Lamperez y Romea, op. cit., fig. 525; of San Salvador de Sepulveda in Segovia, with inscription of 1093; Lamperez y Romea, op. cit., fig. 377 and of San Andrés de Armentia; Lamperez y Romea, op. cit., fig. 488. The Romanesque three-nave church of San Juan de los Cabbaleros in Segovia, Lamperez y Romea, op. cit., fig. 385. Porches on both sides in San Millan, Segovia; Lamperez y Romea, op. cit., fig. 502 and much earlier in the Visigothic church of San Juan de Banos, 661 A.D., Lamperez y Romea, op. cit., fig. 56.

¹⁰ Santiago de Peñalba, between 913 A.D. and 937 (Lamperez y Romea, fig. 112) has entrances in both side walls, but one farther removed from the sanctuary than the other and widened by the insertion of an inner column. In San Miquel de Celanova the only entrance is in the side of the elongated narthex (Lamperez y Romea, op. cit., fig. 119).

Baudel, and later in small elongated chapels, whose vaulted and domed naves became abundant in Romanesque times.² Aisled buildings followed suit and although in them the main, utrance was duly emphasized as a rule, there are some Romanesque basilicas of considerable size, which can be approached only from the side.3 No other province of Romanesque architecture can claim as big a number of round-the-corner constructions as Spain, not even Provence, where one-nave chapels 4 with vaults supported by inner buttresses are clearly derived from Oriental, ultimately Mesopotamian types. The architecture of the eleventh and twelfth centuries in France, Germany and Italy occasionally shows emphasis on one side entrance, but examples are so scattered that in many cases it is doubtful whether the architect received his impulse from existing specimens of the round-the-corner type or whether his plan was the outcome of an attempt to compromise with existing topographical conditions. After having lost more and more ground to the longitudinal scheme, the round-the-corner plan now began to peter out and was relegated to the field of those humble devices that fitted the minor parish church, if the local conditions so required. In the age of the great cathedrals and of their thorough, rational organization of both plan and structure, there was little place for an architectural scheme which must by then long have seemed haphazard, loose and fortuitous.

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¹ Lamperez y Romea, op. cit., fig. 135. An earlier example is the outwardly square baptistry of San Miguel de Tarrasa (*ibid.*, fig. 74).

² For instance, the collegiata of Cervatos (Lamperez y Romea, fig. 366); San Pedro de Tarrasa (*ibid.*, fig. 500); San Nicolaus de Gerona (*ibid.*, fig. 518) and San Martin Sarocca (*ibid.*, fig. 544); all with one side portal and no portal in front. A front entrance is added to the side one in the churches of Olmos (*ibid.*, fig. 345); San Quirce (*ibid.*, fig. 352); Noestra Señora del Valle in Monastero de Rodillo (*ibid.*, p. 357) and Santa Maria de Tera (*ibid.*, fig. 418).

³ Collegiata of Santillana (Lamperez y Romea, fig. 368); Santa Eulalia in Merida (*ibid.*, fig. 470); Santa Maria la Real in Sanguesa (*ibid.*, fig. 480).

⁴ Orange, G. Dehio and Bezold, *Die kirchliche Baukunst des Abendlandes*, Stuttgart, 1884–1901, pl. 93, fig. 13; Le Thor; *ibid.*, pl. 93, fig. 5. The similar small buildings of Reddes, Villeneuve-Avignon and Mollèges are all reproduced on pl. 93 of Dehio and Bezold's publication.

NOTE ON THE POTNIA TAURON

In a recent article W. Technau has discussed the classical representation of the goddess on the bull, including the Europa myth, and has shown that this type is nothing else than one of the numerous survivals of the great omnipotent mother goddess of old Aegean tradition. Among the iconic types, in which this goddess has survived in later art, the most common is that of the bull-riding goddess, probably a direct inheritance from Minoan religious art. Another variety, with the goddess standing on the bull, is preserved in a geometric bronze disc from Tegea 2; it is clearly derived, by whatever intermediary source, from Hittite art. A third type is that visible on a seventh-century bronze slab found in Kolophon and published in a learned article by Ch. Picard (fig. 1). Picard has pointed out the significance in all

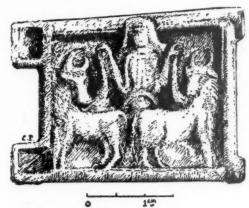


Fig. 1.—Bronze Slab from Kolophon



Fig. 2.—Bronze Slab, Candia Museum

its varied aspects of this small monument, which probably was originally part of a belt-clasp, and he has based on it far-reaching con-

clusions for the process of the formation of Greek religious art, tying up this piece found in Ionia with direct influences from the Anatolian Hinterland.

Years ago, without a knowledge of Picard's article, I became interested on the occasion of a visit to Crete in a small toreutic work, which in the rich collection of the Candia Museum 4 has hitherto escaped attention. I am indebted to Dr. Sp. Marinatos for permission to make a photograph (fig. 2) and for the execution of a cast. The comparison of the two pieces is extremely interesting, both for the question of the origin of the type and for the general problems of early archaic Greek art.

The representation, as well as the general form of the monument, is absolutely identical. In both cases we see the upper part of a draped female figure of the "dedalic" style holding two antithetic bulls on bridles. Picard thought that the figure stood on the ground behind the bulls. He stated that this was an absolutely unique representation and tried to connect the bridles with the use of sacred taeniae in Anatolian

¹ JdI. 52, 1937, pp. 76-103.

² Ibid., p. 89 with bibl., fig. 9.

³ Mélanges Holleaux 1913, pp. 175 ff., fig. 1.

⁴ Inv. N. 1625. Provenance unknown, but certainly discovered in Crete. The two projections on the left side have vertical holes for fastening on a connected part.

cults. Equally unique, as a part of drapery, would be the semicircular arch which is visible between the upper part of the body and the animals. When I saw the other



Fig. 3.—Terracotta Group from Eretria, Athens, National Museum

piece first in Heraklion, I had no doubt that this arch is the upper edge of a chariot, on which the figure is standing, and this is still my conviction. Both the motives, which remained unique in the explanation by Picard, thus are explained. Indeed, we have here, for the first time in Greek art, the well known archaic type of a god (or hero) standing in a chariot facing the spectator in an heraldic scheme.

As the goddess governing the bulls is represented riding or standing on the animal, she was, from the very dawn of Greek art, conceived as driving a chariot drawn by bulls. Mr. Picard has already mentioned later examples of Artemis on such a chariot.³ A primitive terracotta group (fig. 3), from a grave in Eretria,⁴ shows a veiled female figure standing on a chariot drawn by two animals, which seem to be bulls: this is a survival of the archaic frontal iconic type, preserved here in a group of the fourth century

B.C. In the same way, the great mother goddess of Aegean tradition can be represented with other animals, standing on them, holding them as "potnia therōn," riding on them, or driving a chariot drawn by them. We have these varieties not only for "Kybele" with the lions. They occur too with "Artemis" with stags.⁵

M. Picard, as has already been mentioned, saw in the provenance of the piece from Kolophon evidence for the origin of the type of the goddess with the bulls in Anatolia.⁶ When I saw the other piece of certainly Cretan, although not of an exactly known local provenance, it seemed to me to be a rare example of the local survival of Minoan religion. This shows how dangerous it is to draw far-reaching

¹ Mélanges Holleaux 1913, pp. 178 ff. ² Ibid., p. 177.

³ Ibid., p. 198. See, for the late revival of this type (cf. Technau, op. cit., p. 100) the bronze lamp, British Museum, Greek and Roman Lamps, pl. 4, n. 7.

⁴ Here reproduced with kind permission of the Administration of the National Museum in Athens. Inv. N. 4793. H. 0.11 m. yellow clay with traces of white color. As the goddess has a tympanon in the left hand, we may call her Kybele. Hole in the head for suspension. The sides and rear are neglected. The piece was to be seen from the front only and therefore the hind legs are incorporated with the wheels.

⁵ Riding, e.g., Musée du Bardo, pl. II, n. 11; Comptes rendus 1868, pl. I, fig. 3. Driving on the frieze from Phigaleia. The winged figure on the bronze vase published by Sieveking, Münchner Jahrbuch, N. F. 3, 1926, pp. 3 ff., although we may call her Nike, is equally a descendant of the goddess with the stags. Compare the "Nikai" with stags on the diadem of the Nemesis in Rhamnus, Paus. i, 3, 33. The oinochoe in Athens with the procession of children, in which a chariot drawn by stags with a female figure on it, is the central part (Inv. N. 1164; Collignon-Couve, Vases peints du Musée Nat. d'Athènes, p. 602, n. 1876; Deubner, Attische Feste, 1932, pl. 32, figs. 1–2) is another reflex of the same idea. At least, I see no reason to believe just this case as that of a "fantastic" representation (Deubner, op. cit., p. 245). For the representation of gods by children on these oinochoai, see Deubner, JdI. 42, 1927, pp. 172 ff. The scene recalls the fact that the priestess of Artemis Laphria was driving on a chariot drawn by stags (Paus., 7, 18, 12), as the priestess in the story of Kleobis and Biton (Her. i, 31) drives on a chariot drawn by cattle (βóες).

conclusions from a single, though unusual, monument. After the discussion by Technau¹ it seems probable that at least the general idea of the goddess driving a chariot drawn by bulls, is of old Aegean tradition. However that may be, the formal type could still be borrowed from Anatolia, as well as from Minoan art. In both spheres hitherto no prototype exists. It can well be a new creation of Greek archaic art, based on old ideas. Is it then Ionic, or Cretan, or what is it?

This leads us to a consideration of the importance of the repetition of one and the same type in exactly the same form on two monuments of the same kind, one of which is from Crete, the other from a large Ionic center of life. This case, indeed, is so far as I know absolutely unique and very important for the debated question of the formation of Dedalic art. The striking fact is, that the two belt-clasps are not only repeating the same type on the same object, which would, in the two regions concerned, be important enough: they are also made from one and the same model. The dimensions in height and length are the same, with only one millimeter difference in both directions. I.e., the piece from Kolophon is slightly smaller, as occurs in making a new mould from a positive model. The thickness, however, is very different: in the Cretan piece it is about a third of that of the piece from Kolophon (1, 5:4 mm.). There are other differences which show the use of a new mould: on the Cretan piece the two holes on the two projections at the left side are absent 3 and the outline of the hair seems to be slightly different; on the same piece the upper edge is decorated with oblique lines, which seem to be nonexistent on the other one. These are changes which are due to the process of retouching the new mould or even the bronze piece itself. That both pieces are as closely connected as I have mentioned is not only clear from the exact conformity in all other respects, including the proportions, but also from the slight irregularity in the outline of the right edge, which is visible in the careful drawing of Picard as well as in my photograph (and in the cast). The result of the comparison, thus, is that the piece found in Kolophon was made from a mould which had been taken from the Cretan piece, or from a lost third one, that, in turn, had been made from the mould of the latter. In other words, there exist the following possibilities: (1) The Kolophonian piece was imported from Crete; (2) a bronze workshop in Crete exported pieces made from the same mould as that used for the Cretan piece to some other center, possibly in Ionia, and there, from such a piece a new mould was taken, a cast of which came to Kolophon; (3) a workshop somewhere, possibly in Ionia or even Anatolia, exported pieces of this kind to Crete, and itself, or another workshop, reproduced such pieces with new moulds, a cast of one of which is preserved from Kolophon. I see no possibility of deciding where the center of production originally was situated and which of the three alleged possibilities represents the truth. But in any case, this repetition of the same type shows an intimate interrelation between Crete and Ionia in the seventh century B.C., both in religious conceptions and exchange of stylistic features, which is remarkable in itself. KARL LEHMANN-HARTLEBEN

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¹ Op. cit., especially pp. 97 ff. The survival of the type of the lady riding on the bull in later Crete, ibid., p. 94.

² Picard gives the following dimensions for the Kolophonian piece: h. 0.032 m.; l. 0.039 m. The piece in Herakleion is 0.033 m. high and 0.04 m. long.

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GENERAL AND MISCELLANEOUS

U.S.S.R.-

Archaeological Research in Rumania. - In ILN. June 17, 1939, pp. 1123-1125, Dr. RADU VULPE, Professor of Archaeology at Bucharest University, reports briefly on recent archaeological discoveries in Rumania. The center of Neolithic civilization was in Moldavia. This culture is known as the "Cucuteni" culture, from the site where it was first found. It is characterized by painted pottery with spiral motifs in two or three colors, and terracotta idols representing a female deity. In recent excavations conducted by the author at Izvoare an earlier layer was found below the first Cucuteni stratum, the first evidence of a prehistoric civilization in Moldavia. It has been called "Izvoare I." Its characteristic pottery is ornamented with lines of dots, which were pressed into the soft clay with a toothed comb before the vase was baked. Female and animal idols were also found. This prehistoric civilization was closely connected with the later Cucuteni culture. Excavations during the past season proved the existence of an intermediate layer, with pottery in a clearly transitional style. The origin of this Rumanian Neolithic civilization is still a problem, to be solved after further excavations and study of the results. It can be stated. however, that both the Izvoare and Cucuteni cultures have strong connections with the East, Mesopotamia, Central Asia and China. It is thought also that the original inhabitants were not Indo-Europeans. There is evidence of violent destruction at all the Cucuteni sites and a complete disappearance of the culture. This is attributed to the first invasion of the Indo-Europeans at the beginning of the Bronze Age.

Langobards, Bajuwars, Slavs. - In Mitteil. Anth. Ges. Wien, lxix, 1939, pp. 41 ff., E. Klebel attempts to bring forth some presumably new light, allegedly gathered in hitherto overlooked sources, on the movements and succession of the three stated ethnic groups. The Langobards are said to have been in the Danube valley from 506 until their departure for Italy in 568. The Bajuwars are supposed to have followed the Marcomani about the middle of the sixth century. As for the Slavs, the reader may judge the author's iniquitous thesis from the following quotation (p. 103): "Vor 567 hat kein Slave die Karpathen ueberschritten oder in Boehmen siedeln koennen. Man kann es gegen tschechische Anmassung nicht oft genug wiederholen." The listed references confirm the suspicion that the author is not acquainted with standard works on Slavic antiquities many of which, incidentally, have been written in English, French, and German.

Stone Circles in Northern Ireland. - In Ulster. Jour. of Arch., 3rd ser., 1939, pp. 2 ff., O. DAVIES records ninety-one stone circles of various types hitherto unknown in literature. "The Ulster circles are nearly always composed of low stones, often not more than a few inches high and set on edge, normally not contiguous. . . . The usual diameter is rather less than fifty feet. . . . Nearly all are above the 500 ft. contour . . . " (p. 2). The typological grouping is logically devised, the author evidently having devoted ample time to field studies. There is no definite evidence concerning the purpose of the circles, although burial structures are said to have been found in several cases. The question of dating is likewise an open one. The author points out that they antedate the formation of the present peat which occurred some 2000 years ago. A possible relationship to the Megalithic monuments is suggested.

Excavations at Clogherny. - In Ulster Jour. of Arch. 1939, pp. 36 ff., O. DAVIES describes his excavation and finds in two stone monuments. One was a megalithic chamber capped by a single stone, with a circular cairn, and surrounded by a ring of uprights; no pottery was found, but the author feels that the barbed arrow head of flint, found in the chamber, indicates the Bronze Age. The other site was a stone ring which failed to reveal any definite evidence of its original purpose. Davies opines that some circles may have been graves and that peat acid would conceivably dissolve cremated bones without stone covering.

Chillham, Kent.—In AJ. xix, pp. 260–281, R. F. Jessup describes the excavation of the barrow at Julliberrie's Grave. Like most non-chambered long barrows this is dated late in the English Neolithic. Of particular interest is a flint axe of thin-butted Scandinavian type, providing evidence of the cultural connection with the megalithic graves of Holland and the Baltic. In the ditch of the barrow are Roman burials of the first century.

Badbury Barrow, Dorset.—In AJ. xix, pp. 291–299, Stuart Piggott describes a carved stone discovered in 1845 in a barrow, now destroyed, located near Winborne. The stone bears carvings of daggers and axes. While representations of axes are commonly found carved on megalithic monuments, representations of daggers are so far unknown in Brittany or elsewhere in Britain, although found in Germany and in southern Europe. The date of this particular carving is the early Bronze Age.

Dorset.—In Antiq. xiii, pp. 138–158, Stuart and C. M. Piggott publish for the first time a complete set of plans and descriptions of Dorset stone and earth circles. Several new sites are added to those listed in the O. S. Map of Neolithic Wessex.

Castor, Northants.—In Antiq. xiii, pp. 178–190, C. Hawkes describes the Roman camp site near Castor on the Nene. Three camps, first discovered in 1930, are described from air photos. These are perhaps datable to the earliest occupation of the site under Aulus Plautius; two seem to be temporary marching camps, while the third seems to have been used under Ostorius.

Roman Roads.—In Antiq. xiii, pp. 191-206, F. G. Roe discusses the lack of relationship between the present winding roads of England and the Roman road system, basing his conclusions upon his observation of the way roads were developed in Alberta some forty years ago.

EGYPT

Semitic Influences on Egyptian Civilization. – B. Hrozný in Archiv Orientální Dec., 1938, on the

basis of the words for cereals, hoe, plough, beer, and brewers' vat, comes to the conclusion that the Egyptians borrowed them from the Babylonians and Sumerians long before the Pyramid Age. He maintains that the Semitic Akkadians were in Babylonia with the Sumerians in the first half of the fourth millennium B.C. He believes that the Semites invaded or filtered into Egypt from Amurru during the second prehistoric Egyptian civilization and that the Semitic influence upon the Egyptian language extended over a long time.

Latest Discoveries at Hermopolis. - Dr. Sami GABRA reports in ILN. May 13, 1939, pp. 838-840, on the results of the last season's excavation at Hermopolis, the sacred city of Thoth. Work is being continued in the subterranean galleries. The galleries excavated this year had not been plundered. The contents had not been disturbed since the doors were sealed by the priests about 600 B.C. The rooms were filled with thousands of jars. Some contained mummified cynocephali and ibises, sacred animals of Thoth. Other jars contained ex-votos, statuettes, wooden and faïence objects. One bronze statue represents a priest kneeling with the offering between his hands. Most frequent are statues of ibises. A large demotic papyrus was discovered in the archives office. It contains "a corpus of laws defining the relations between landlords and tenants, as well as rules of inheritance."

MESOPOTAMIA

Mari. - In Syria xx, pp. 1-22, André Parrot describes the ziggurat and the Ur III palace excavated during his fifth campaign at Mari. On the site of the ziggurat at least seven periods of construction were discovered, ranging from pre-Sargonic days (before 2500 B.C.) to tombs that may be as late as the Sassanian period. The ziggurat itself belongs to the class of small stagetowers. A little chamber near the northeast corner contained a curious collection of seventy stone eyes, some still in their bronze casing. Artistically the best find of the season is a small bust of a man carrying a sacrificial kid. This piece, of Ur III date, has a wealth of detail. Parrot makes every reasonable effort to reconstruct the ancient scene from the excavated ruins-particularly in the field of religion. - In PEQ. July, 1939, emphasis is laid on the fact that the tablets found here shed light upon the fourth Lachish letter, which has a reference to signal-stations and signals. According to the Mari tablets signalling was done by lighted torches. A tribe of Benjaminites, settled on the Euphrates between Mari and Terqa, passed the news from one village to another by means of lifted torches; this method served both military and civil purposes.

Oldest Extant Boundary Stone.—André Parrot publishes the oldest kudurru (i.e., boundary stone) ever discovered (AfO. xii, pp. 319–324). The monument, which comes from Larsa and depicts seven interesting human figures, can be as early as the Jemdet Nasr period, but in no case postdates the Early Dynastic age. The kudurru bears a lengthy and well-preserved inscription, which Parrot does not interpret, but which deserves a thorough study.

Unpublished Assyrian Reliefs.—Ernst F.Weidner concludes his valuable survey of hitherto unpublished Assyrian reliefs, with photographs and descriptions of eight more monuments in English museums (AfO. xii, pp. 325–341). The interest of this survey is enhanced by the fact that good pictures and drawings of some already known pieces are included for comparison.

Turkish and Mesopotamian Ploughs.—In ZfE. lxx, 1939, pp. 343 ff., E. Werth discusses the typology and distribution of the plough in Anatolia and the Near East. He recognizes three fundamental types, which appear to be characteristic of as many geographic zones, and traces each type historically. The work is based on field and museum studies. Werth also correlates the major varieties of cereals and live stocks with each type. He includes a brief mention of the history of the plough in Mongolia and its relationship to Europe.

Inscription from Kythera. - The inscription from Kythera discussed by H. Thomas in JHS. lviii, 1938, p. 256, is shown by Ernst F. Weidner in JHS. lix, 1939, pp. 137-138, to be an early Babylonian cuneiform inscription which has long been an object of study by Assyriologists. Dating perhaps around 1950 B.C. it reads as follows: "To Sin, [King of Esnunna], son of Ibiq-Ad[ad, King of Esnunnal for his life [dedicated (this)]." The Kythera inscription, early Babylonian seal cylinders found in Crete, and early oriental records raise the question whether in the first two centuries of the second millennium B.C. there were not trade relations, even if limited, between western Asia and the Mediterranean area as far as Greece.

ASIA MINOR

Cilicia. - J. Garstang has devoted two winter seasons (1937-38) to excavating an ancient mound inland from the port of Mersin; the place is called Sôuk Su Hüyük (Cold Water Hill), and commanded a narrow pass between the Mediterranean and the range of the Taurus. The main trade route between the Troad and Mesopotamia by way of Carchemish ran past the mound. Here are Neolithic and Chalcolithic cultures with marked Mesopotamian relations. A subsequent transitional phase suggests contacts with Troy and Lesbos, as well as with Early Bronze Age sites on the plateau. The higher levels (2100-1500 B.C.) reveal a period of continuous occupation by a people whose relationships extended to the Anatolian plateau and Northern Syria. These were crowned by a Hittite fortress of the Early Imperial Age. The uppermost levels show traces of interrupted periods of settlements in Early Greek, Byzantine, and Mediaeval Arab times (PEQ. July, 1939).

Hittite Hieroglyph.—R. Demangel, in BCH. lxii, 1938, pp. 180–193, constructs a series of hypothetical relations between the Hittite hieroglyph for "god" and various scattered prehistoric and Greek motifs.

PALESTINE AND SYRIA

Palestine "Neolithic." - As the result of his last excavation at Jericho, Garstang announced the discovery of a Neolithic culture, resemblances to which were to be found in Thessaly, rather than in the Orient. Level VIII was labelled "Recent Neolithic," level IX "Middle Neolithic," and levels X-XVII "Ancient Neolithic." Beneath the latter was a Mesolithic culture represented by microliths of Natufian III-IV types. The Ancient Neolithic was characterized by an absence of pottery and worked metal, its chief positive feature being a certain type of house construction. Pottery made its first appearance in Middle Neolithic (level IX) and we are told that in this pottery "we have, no doubt, the very beginnings of pottery in Palestine.'

At no other site in Palestine has a Neolithic stage been found, the Mesolithic being followed directly by the Chalcolithic. The Jericho finds, as interpreted by Garstang, thus provide a striking exception to the general rule. But Père Vincent (RB. xlvii, pp. 561-589; xlviii, pp. 91-107) maintains that they should really be classed as

"Chalcolithic." He draws attention to the disagreement between Garstang and his technical collaborators as to the Neolithic character of the pottery and flints of level VIII. Ben Dor had labelled the pottery from this level "Chalcolithic," but Garstang changed the label to "Recent Neolithic." It is true that Ben Dor regards the pottery of level IX as Neolithic, but Père Vincent says that the difference between the pottery of levels VIII and IX is so slight and the stratigraphy so uncertain that there is no justification for pushing that of IX back into the Neolithic. He agrees with Miss Crowfoot that the flint industry of Jericho is a local variety of Tahunian II, but he points out that, according to Neuville, Tahunian is not a Mesolithic or Neolithic culture as Buzy, its discoverer thought, but a Chalcolithic. The case for an affinity between the supposed Neolithic of Jericho and the Neolithic of Thessaly gains little support from the cautious pronouncements of Droop. As for the style of building in levels X-XVII, Père Vincent maintains that it has parallels in the Chalcolithic levels of Ghassul, Fara', Megiddo, and 'Affuleh. The comparison of house 208 with the megara of Thessaly is pointless, for the latter cannot be earlier than the first half, or the middle, of the third millennium. The absence of metal must not be stressed too much in a country like Palestine; it does not even appear in levels which Garstang himself assigns to Early Bronze. The absence of pottery in the early levels is no more surprising than its absence in Stage VII of Megiddo, or in level V of Ras Shamra (assigned by Schaeffer to the Chalcolithic era). The conditions of life had not yet imposed the need for it. When it appears in level IX it is already in too developed a form to represent the product of a nascent industry, and must be due to the intrusion of an outside influence.

We must be on our guard against assuming the same succession of prehistoric cultures everywhere. The failure to find a Neolithic stage in Palestine creates only an apparent hiatus. The succession at Jericho as elsewhere in Palestine is Mesolithic-Chalcolithic-Early Bronze. There even seems to be a racial unity between Mesolithic and Chalcolithic.

The Lachish Letters.—An important contribution to the interpretation of the first six letters is made by Père de Vaux in RB. xlviii, pp. 181– 206. He vigorously assails the theory which regards the letters as a group dealing with the same subject. The palace was not rebuilt following its destruction in 597. The fortified complex at the principal entrance of the city where the letters were found marks the seat of the administration from 597 to 588. The letters recovered represent a scanty survival from its archives and have no necessary relation to each other. The supposed reference to Jeremiah is declared incapable of proof.

Temple at Brak.—In ILN. 1939, pp. 882-884 (one color-plate), M. E. L. MALLOWAN describes the latest discoveries at Brak. During the fall of 1938 the earliest temple yet discovered in Eastern Syria was excavated. The building was of mud brick, buttressed on the north and west with massive blocks of limestone and basalt. The south wall was decorated with a mosaic of clay cones, stuck into plaster, and a frieze of rosettes with petals made of black shale and white marble and centers of red limestone. Somewhat similar ornament has been found at the Sumerian city of Uruk. It dates at the end of the Jemdet Nasr period.

The temple rested on a great platform of mud brick. Thousands of votive offerings were thrown in with the bricks when the foundation was dedicated. The most characteristic dedication was a magic eye, made chiefly of alabaster. Owing to the great number found in the building, it has been called by the excavators the "Temple of a Thousand-Eyes." Though the temple had been destroyed and the majority of its treasures stolen. many remarkable objects were recovered. The walls of the central shrine room were covered with copper panels stamped with the design of a magic eye. A base against the south wall of the shrine must once have supported a statue of the god. The three exposed faces of this base were originally decorated with a frieze. A great part of this frieze was found. Each panel is a little over three feet long and eight inches wide. It is made up of blocks of blue limestone, white marble and green shale with gold borders. It was fastened on a wooden backing. The gold borders are fastened with gold-headed silver nails. The frieze is thought to show religious symbolism, the materials and design representing those used on the exterior of the temple walls. Many beautiful amulets were also found among the objects dedicated in the platform. They are exquisitely carved in various animal forms.

Hebrew Language. $-\Lambda$. M. Honeyman in the PEQ. April, 1989, discusses the pottery vessels of the Old Testament.

Negeb. - E. Epstein, in the PEQ. April, 1939, considers the Bedou the father rather than the son of the desert. By raiding settled areas and harrying cultivators, the Bedou has helped the desert to encroach upon the sown and to expand beyond its natural borders. Such a struggle is apparent in the Gaza-Aqaba-Dead Sea Triangle. One reason why the Negeb Bedouin do not have high social standing is that they do not devote all their time to camel breeding, but occasionally do some desultory cultivation. The competition of the train, the motor car, and the aeroplane has caused a drop in the prices of camels and horses, and in consequence the social life of the Bedouin has gone through a period of confusion and disintegration.

Palestine Stirrup Vase from Gett.—In Mitteil. Anth. Ges. Wien lxix, 1939, pp. 39 ff., A. Jirku describes a stirrup vase found by a peasant, presumably in a grave, at Gett. The author considers the vessel a local copy, datable to the Late Bronze Age. The small size of the specimen (height 11 cm., base diameter 4.5 cm., maximum diameter 7.5 cm.) is taken by him to indicate a funerary rather than a domestic purpose. Especially noteworthy is the painted decoration, which consists of parallel vertical stripes between two horizontal bands placed respectively on the neck and on the belly. The author considers the decoration, executed in reddish-brown on a dark-brown ground, an original and unique phenomenon.

TRANSJORDANIA

Petra.-In QDAP. viii, pp. 87-115, plates xliii-lvi, Mr. and Mrs. Horsfield present the second instalment of their report on the excavations conducted at Petra from 1929 on (cf. AJA. xlii, p. 565). The pottery sequence was established by four cuts, the largest being made in the Katūte dump. Three strata were discerned. Stratum I is assigned mainly to the late second century A.D., Stratum II mainly to the first century B.C.-A.D. There is some overlapping between the strata, owing to the fact that the spot excavated was a dump. For this reason, in Stratum III the pottery was classified as coming from the front, middle, and inside of the cut. That on the inside would be the earliest. The front yielded coarse pottery with fragments of sigillata of the second century B.C., while the inside yielded dated jar handles of the late third and first half of the second centuries B.C. and imported Attic ware of ca. 300 B.C.

A large number of tombs were then examined

and classified according to the established pottery sequence. Many, of course, were completely empty. Only two (E3 and E4 on the Mu'eişra Ridge) contained pottery of the early Stratum III type. Both were shaft tombs. The bodies had evidently been burnt outside the tomb and the bones then placed within, together with a few bronze treasures and common pots. The pottery of the majority of the tombs belongs to the types from Strata I, 2 and II, 1 (1st cent. B.C.-A.D.). The Palace Tomb, the Khazne, the Tomb of the Urn, and the Tomb of the Roman Soldier were cleared in 1936, but all had been rifled. In the latter a sarcophagus base was found which indicates that the niches in these tombs were designed to receive sarcophagi. The tomb of Sextus Florentinus yielded only a few fragments of alabaster vases, found in the central and most elaborately carved recess in the back wall, which doubtless marks the burial place of the legate. The Tomb of the Triple Dushara contains three graves orientated to three baetyls of Dushara, a unique arrangement at Petra. On carefully scraping off the red sand from the top of grave No. 2, "a layer of quicklime appeared down the centre of the grave, roughly the shape of a human figure in outline. . . . When broken into, this disclosed a layer of black dust, about 0.10 m. thick, extending its whole length and beneath was another layer of lime." In the other two graves the same method of cremation had been employed. Sayce thought this discovery proved the Edomite use of lime for burial and the corruption of the text of Amos 2, 1, since the curse should fall on Edom rather than on Moab. But is not the evidence so far against regarding it as an Edomite or Nabataean custom?

The pinnacle known as Ez-Zanţūr was subjected to a careful surface examination and the outlines of a large fortress discerned. The excavators believe it to have been the residence of the Nabataean kings. The eastern face was scarped, but on the west four levels can be traced: an upper platform crowned by a tower, and below it three terraces, each about 20 m. wide. There is evidence that it was occupied as early as 300 B.C.

Nabataean Statues.—Père de Vaux reports the discovery at Mâ'in of two headless busts of Nabataean divinities. One has a strap over the right shoulder, like Ares, and may possibly be an image of Shai' el-Qaum. The other bust is that of a goddess. The statues probably come from the middle of the first century A.D. Their presence at Mâ'in shows that the Nabataean frontier ex-

tended this far north (RB. xlviii, 1939, pp. 78–86).

Minaean Jar. — The South Arabic inscription on the jar discovered by Glueck at Tell el-Kheleifeh is discussed by M. RYCKMANS in RB. xlviii, pp. 247–249. He believes the signs are monograms, such as appear occasionally on South Arabic monuments. The elements of the monograms are drawn from the North Minaean writing. Since the jar comes from a stratum which Glueck dates to the eighth century B.C., Ryckmans believes this is evidence that the North Minaean inscriptions are not later than the eighth century.

Coins of Transjordania.—A. S. KIRKBRIDE (in *PEQ*. July, 1939) classifies in a general manner approximately 5000 ancient coins found in Transjordania between the years 1928 and 1937.

GREECE

GENERAL AND MISCELLANEOUS

New Discoveries at Delphi. - A brief report of some remarkable finds made recently at Delphi by the French School at Athens appears in ILN. July 29, 1939, pp. 202-203. Excavations were resumed at Delphi in 1938. It was discovered that the pavement of the Sacred Way consisted of reused material. Some of these stones were raised opposite the Stoa of the Athenians. Objects of gold, ivory and bronze were found buried in a ditch beneath the pavement. Parts of three lifesized and five smaller chryselephantine statues were found. The ivory is badly eroded but the gold is perfectly preserved. One ivory head can be identified quite clearly as Ionian sculpture of the first half of the sixth century B.C. Two superb gold plaques were found. They were originally attached to the legs of a statue and represented the embroidery on the bottom of the dress. They are adorned with reliefs. The Eastern motifs, griffins, sphinxes, gorgons, lions, deer and other animals

are in the Ionian style and of the same date as the ivories. In addition to the remains of chrysele-phantine statues, a great many ivory figurines were found. They seem to have formed part of a battle scene and may have decorated the arms of a throne. A number of archaic bronzes has also been recovered.

Philippi. - In BCH. lxii, 1938, pp. 1-3, R. DEMANGEL publishes a plan of the site, based on the excavations of 1914-1937 and on air photographs, of which one is published on pl. 2. These photographs revealed several structures invisible from the ground, but DEMANGEL does not specify which ones. H. Ducoux and P. Lemerle (op. cit., pp. 4-19) publish with elaborate plans the walls on the slopes, which are Greek (soon after 358 B.C.), repaired twice in Byzantine times, and the walls of the acropolis, where the Greek walls seem to have been thoroughly destroyed; but the Byzantine fortifications of 963-969 still stand. Not a block of the entire circuit is attributable to the Roman period. J. Roger (op. cit., pp. 20-37), with more good plans, and a better knowledge of Greek forts and walls (though not of Corinth), publishes the walls in the plain, with three remarkable gates of the Greek period. J. COUPRY (op. cit., pp. 42-50) publishes a semicircular Ionic portico of reused (?) materials, situated west of the Forum.

The Mussel in Ancient Art.—In the Eull. de l'Inst. Arch. Bulgare xii, pp. 1–131, Maria Bratschkova reviews the uses of the mussel in antique art and lists the recorded examples. She shows that the oldest use was in connection with the birth of Aphrodite, but that the use is highly extended as an architectural member, where it is confused by the Romans with the baldacchino as an imago clipeata, as a vessel of various materials and shapes, and as a mere ornament. She traces the various uses from the Cretan period to the thirteenth century A.D., although it was most common between the second century B.C. and the second century A.D.

Origin of Hera Cult.—In Athenaeum xvii, 1939, pp. 105–137, U. Pestalozza examines the Argive myth of Io and the Greek and Oriental figures of cow goddesses and bull gods, particularly Anahit and Mithra, in an attempt to prove the Minoan-Mycenaean origin of Hera. He concludes that Hera was originally one of the manifestations of the great Mediterranean and eastern female goddess.

Armor in Tyrtaeus.—R. NIERHAUS in JdI. 1938, pp. 90-113, discusses the implications of

Tyrtaeus vi-vii, 25. Wilamowitz, in arguing against Dümmler that the passage was not evidence of the custom of castrating a fallen enemy, failed to prove his case. But by the monuments he might have proved it. The body armor of the Tyrtaean phalanx was a metal cuirass, as the art of that time shows us. To stab above or below the cuirass was the only way of wounding an enemy so protected; here Tyrtaeus is describing not mutilation, but a wound in the exposed groin. Incidental contributions of this paper: proof that the great shields of Geometric art correspond well enough to the Homeric tower shield, and that the latter did not survive into the time of Tyrtaeus; lists of seventh-century cuirasses and of vases illustrating the offensive tactics necessitated by the defensive armor of the phalanx; argument that a well known "Melian" vase-painting need not be interpreted as the duel of Achilles with Memnon.

A Sybarite Himation.—D. S. ROBERTSON takes issue in JHS. lix, 1939, p. 136, with P. Jacobsthal's interpretation of a Sybarite himation, published in JHS. lviii, 1938, pp. 205–216, and argues that with the proper text corrections in Pseudo-Aristotle, de miris auscult., 96,838a, a less puzzling design on the himation would be easily understood as showing in the center six Greek gods, along the top a frieze of "Scythians," along the bottom a frieze of "Persians," at one end Alkisthenes, at the other end Sybaris. Such a himation might have been made before 510 B.C.

Athenian Topography.—In BCH. lxii, 1938, pp. 55-59, A. Outrey publishes two drawings by Fauvel of the Pnyx region, with notes on Chateaubriand and Lykabettos.

Papyri. – RÉG. li, 1938, pp. 502–539, presents the usual excellent papyrological bulletin by Paul Collart. The present list, No. VII, contains the material for 1937.

AEGEAN CIVILIZATION

Excavations at Krisa.—In BCH. lxi, 1937, pp. 299–326, J. Jannoray and H. van Effenterre present the archaeological evidence, which proves most notably (see BCH. lxi, 1937, pp. 33–43) that the only ancient occupation at Krisa was a Middle Helladic settlement destroyed by a fire and soon rebuilt, in Late Helladic I-II; in Late Helladic III the citadel was walled.

Pottery from Krisa. – In BCH. lxii, 1938, pp. 110–147, J. Jannoray and H. van Effenterre continue the publication of the campaign of 1937.

L.H. pottery, gray Minyan, yellow Minyan, decorated styles were found (this classification is a modification of the usual groupings). There is no break when L.H. begins; no distinction between L.H. I and II; and no break at L.H. III.

Minoan Hieroglyphic Inscription.—Found by a peasant at Mallia, a triangular stone, cut to form a "libation table" on top, has an inscription of 15 characters running vertically down the side—the longest extant hieroglyphic text on stone. Date M.M. III, since the characters are considerably stylized (F. Chapouthier, BCH. lxii, 1938, pp. 104–109).

ARCHITECTURE

Temple of Apollo at Corinth.—Saul Weinberg, in Hesp. viii, 1939, pp. 191–199, presents an account of the pottery which he recovered from the undisturbed fill under the north pteroma of the temple and from débris dumped on the temple hill. Both deposits seem to date to the period of construction of the temple, and the evidence for both is in agreement. The pottery belongs to the early third quarter of the sixth century B.C., and indicates that the temple was constructed at that time. The old belief that the builder was the tyrant Periander must be abandoned.

Column Bases of Rhoikos. - The temple of Hera at Samos, built by Rhoikos, and excavated by Wiegand and Buschor (AM. 55, 1930, pp. 72 ff.), the earliest great Ionic dipterous of the archaic period had 134 columns. Of these 102 cylindrical bases and tori of equal height (ca. 27 cm.) have been recovered, mostly found built into the foundations of the more recent temple. Heinz JOHANNES in AM. 62, 1937, pp. 13-37, gives an exact account of all bases, their original position, diameter, height and turning. The fact that the bases are turned like wood in a process described by Pliny xxxvi, 90, is their outstanding feature. Different profiles in delicate carving are used for the different groups of columns employed in different parts of the temple. This technique had no future, but it is characteristic of the spirit of adventure of the sixth century B.C.

Triglyphs.—In BCH. lxi, 1937, pp. 421–438, R. Demangel considers the Doric frieze not a living or fossilized element of the order, but as one of the most sacred Dorian religious symbols. Material from Mesopotamia, Egypt, Crete, Sparta, Corinth, etc., is cited.

The Mausoleum.-H. W. Law in JHS. lix, 1939, pp. 92-102, re-examines the evidence for

the tomb of Mausolus, in the opinion that only the restorations of Cockerell and Stevenson explain in any way the reputation of the monument in antiquity, especially for lightness and beauty. He presents a new restoration in accordance with the "small-plan" type. This kind of plan allows an orderly progression from summit to base, Law believes, an important feature of which is the pyramid of 24 steps below the pteron, equal in height (24 ft., 6 in.) to that pyramid which surmounted the pteron, each pyramid having a base below it. This small-plan type likewise allows a restoration of columns on the pteron in a double row, twentytwo in the outer range, and fourteen in the inner. In the center of the pteron, which Law restores without a cella, he places a colossal statue of Zeus Labraundos. The long sides of the pteron allow six intercolumniations, measuring in all 61 ft., the fronts, five with a length of 54 ft., the whole base being approximately square, ca. 107 ft. in English measure on a side, and the monument some 118 ft. high, with the quadriga ca. 20 ft. more. The frieze representing an amazonomachy is located on the podium of the pteron; the frieze of a centauromachy on the base beneath the lower pyramid. The figures of Mausolus and Artemisia stand on the platform at the foot of the lower pyramid. The peribolos was probably approached from below by a series of terraces from the agora, and by steps on the east and west, as well as by a staircase which Law believes existed on the north.

NUMISMATICS

Athenian Coins with Magistrates' Names.—Continuing his studies, the expert M. L. Kambanis publishes in *BCH*. lxii, 1938, pp. 60-84, a new tetradrachm, which establishes the series Dionysios-Demostratos. This series is one of a series of 19 to be dated after 83 B.C.; they are the last of the New Style coins of Athens.

Greek Federal Coinage.—MARGARET THOMPSON, in *Hesp.* viii, 1939, pp. 116–154, publishes a hoard of silver coins, buried in some place not certainly ascertained, shortly before 146 B.C., consisting mainly of triobola of the Achaean League, along with a number belonging to the Actolian League, and earlier non-league coins, explained as circulated by the Actolians. The author devotes considerable space to the problem of the ascription of coin types to the various Achaean League cities, notably Troezen, Dyme, Megalopolis, and Messene.

SCULPTURE

Herakles and Triton.—OSCAR BRONEER, in Hesp. viii, 1939, pp. 91–100, publishes an early archaic head from the excavations of the North Slope of the Acropolis. It fits the body of Herakles of the well-known Triton group, and faces forward, a fact which alters the conjectural restorations previously offered. Since the rest of the pedimental group was found in the "Tyrannenschutt" south and east of the Parthenon, the question is again raised whether "Tyrannenschutt" and "Perserschutt" may not be one and the same thing.

Attic Statue Bases.—In Bull. de l'Inst. Arch. Bulgare xii, pp. 132–181, Anton Raubitschek discusses the technique and forms of the early Attic statue bases. He considers the methods by which the early bronze and marble statues were affixed to the bases, and the various types of blocks, pillars, and columns that were developed in order to elevate the statue and attract for it greater attention.

Melian Reliefs. - P. JACOBSTHAL in JHS. lix, 1939, pp. 65-70, discusses the list of "Melian" reliefs, some twenty in all, that are strictly Melian, i.e., of known Melian provenience, and includes in this discussion two new Oxford reliefs recently presented to the Ashmolean Museum by J. D. Beazley. One represents a third known replica of the lyristria with the lover, the other, a most important addition to the group, gives the upper half of the incomplete Niobid scene from Berlin, showing a paidagogos and a maiden belonging to a pre-Pheidian cycle of the Niobids, undoubtedly ranking with the Choephoroi plaques in Berlin and Paris as a copy of a priceless painting. These reliefs owe their essence to the Choephoroi and Niobe of Aeschylus, and the Niobid group is a work of the earliest part of the decade 460-450 в.с.

Funerary Stele from Delphi.—In BCH. lxii, 1938, pp. 97–103, C. KAROUZOS examines the stele which was not, he shows, first published in BCH. lx, 1936, pp. 364 ff. The date should be ca. 470; the style is simple and severe, not archaic.

"Poseidon" of Artemision.—The grandiose bronze found in 1928 in the sea near the promontory Artemision off the island of Euboea has been considered by some scholars as a statue of Zeus, by others of Poseidon. (Cf. Beyen, La Statue d'Artémision, 1930; Karuzou, Deltion 13, 1930/1, pp. 44 ff.; Noack, Antike 5, 1929, pp. 214 ff.) J. JÜTHNER in AM. 62, 1937, pp. 136–148, refutes

both interpretations, because the position of the fingers of the right hand is in his opinion adapted neither to the holding of a thunderbolt or of a trident. The index finger is removed from the others in such a way, that according to JÜTHNER, only the leather strap of a spear, fitted into the hand, can have been wound around the index and the middle finger (cf. fig. 1). Thus, in his opinion, the bronze represents an athlete beginning the movement of rushing forward before throwing the spear, which he holds with the help of the tense knot of the strap. The heroic scale (2.10 m.) he considers no hindrance to this interpretation, as he finds the Doryphoros of Polykleitos of about the same height (2.12 m.). He forgets, however, that the "canon" is standing upright, while the "Poseidon" is striding forward and thus the actual height is larger.

The Parthenon Master. - B. Schweitzer (JdI. liii, 1938, pp. 1-89) argues that while analytical connoisseurship has shown that there are many styles in the sculptures of the Parthenon, it has rather illuminated than obscured the unity of design. There is variety, and there is development, which culminates in the almost anachronistic illusionism of the west pediment. But the more exactly we understand the process of execution the means used and the order followed-the more clearly we perceive that the variety is controlled, and that the development corresponds to the experience and growth of a personality, the Parthenon Master. Study of the Parthenon from this point of view must begin not with the metopes, its earliest sculpture, but with the cella frieze; for here, in the correlated work of regular teams of sculptors, is the clearest revelation of elaborate planning; here too we pick up the chronological thread. Its earliest sections are the western and eastern, the former designed before the latter, but both executed at the same time, on the ground; next, the northern, executed in situ during the work on the concretely "objective" east pediment (for the epigraphic evidence does not really conflict with this); later, also carved in situ, the south frieze, before the completion of which the west pediment must have been begun. Where is the designer's own style most evidently discernible? Most palpably, though not most significantly, in the metopes, especially where poor execution does but reveal the very conception that it has marred, or anticipations of a later manner are set off by an old-fashioned context. But for essential faithfulness to the Master's prescription we may look especially to the east pediment, the climax of his technique of control. The west pediment, though he set its content and manner, lacked his supervision in the last stage of its execution, like the west half of the south frieze. In seeking to recover the Parthenon Master's method of designing, we must recognize that his energy and his time were limited. Sketches for each division of the sculptures he must have made, and in the north and part of the south frieze these were traced on the stone itself. But the plastic models, indispensable for metopes, short friezes and pediments, were not, at least in their final and decisive form, his work. Was the Parthenon Master Pheidias? That is a question which must await the sequel to this preliminary study.

Boy's Head from Parthenon Metope. - Our knowledge of the Parthenon metopes is fragmentary. We therefore may hope that more fragments and particularly some of the many missing heads might turn up occasionally. WALTER MÜLLER, director of the Albertinum, the museum of sculpture in Dresden, publishes a youthful male head in private possession in Dresden, which has been broken from a high relief (AM. 62, 1937, pp. 52 ff., pls. 29-30). The style is similar to the heads from the earlier Parthenon metopes (cf. Collignon, Le Parthénon, pls. 36-37; Smith, Sculptures of the Parthenon, pls. 23, 2 and 24, 1), which continue the style of Kritios. The scale is a little smaller than the heads of the Lapiths and therefore could only represent a boy from some otherwise lost metope.

Attic Three-Figure Reliefs. - A melung in 80 Berlin Winckelmannsprogram, 1923 has added the relief of Herakles with the Hesperids to the three well-known reliefs of Orpheus, Eurydice and Hermes; Theseus, Peirithoos and Herakles; and Medea with the Peliads, which since Reisch (Griechische Weihgeschenke, pp. 130 ff.) have always been considered a unit of the same type, period and artistic school. Heinz Götze, in 'RM. 53, 1938, pp. 189-280, pls. 32-38, corroborates this general opinion by collecting all replicas of the four reliefs, discussing their restorations, style, artistic value, date of the copies, their execution and relationship to each other, in order to envisage the originals as closely as possible. He publishes a little known fragment of the Theseus-Peirithoos relief in Paris (pl. 35, 2) and an excellent unpublished fragment from the Herakles-Hesperids relief in the Metropolitan Museum of Art at New York (pl. 37, 2), which looks like part

of the same copy as the one in Leningrad (pp. 225-7, pl. 36, 2 = Amelung pl. I). Götze assumes one master and two helpers, each of whom executed two of the reliefs, the one the Orpheus and the Theseus-Peirithoos relief, the other the Peliads and Hesperids reliefs (pp. 235-239, figs. 3-6). He decides for a date shortly after 420 B.C., the reliefs being in style intermediate between the Parthenon frieze and the Nike temple parapet (pp. 239-245). He would like to follow Bruno Schröder in making Alkamenes the master of the reliefs (Schröder, Alkamenesstudien, p. 9). The use as voting offerings is certain, but it is impossible to determine the ancient setting. In his last chapter (pp. 251 ff.) Götze refutes the opinions of different scholars who believed that various other reliefs reconstructed from vases and sarcophagi belong to the same class as the three-figure reliefs, such as the sacrifice of Iphigenia on the Ara of Kleomenes, Iphigenia with Orestes and Pylades in Tauris, Pelias and the Peliads and others, which, however, though related, are not identical in their composition. Lastly Götze sketches the earlier story of the development of the three-figure-composition from Corinthian bronze reliefs, Attic vases, and the Eleusinian relief to the harmonious and tense compositions of the four great classic Three-Figure Reliefs.

Dedication of Leagros.—A. E. RAUBITSCHEK, in Hesp. viii, 1939, pp. 155–164, argues that the base in the Athenian Agora bearing the dedication of Leagros to the Twelve Gods was made for a statue of Leagros as victor in the pentathlon, and interprets a red-figured cup in Baltimore as showing Leagros looking at that statue. He would date both the base and the cup in the neighborhood of 490 B.C.

The Sleeping Ariadne. - The Hellenistic figure of Ariadne sleeping in a restless position on rocks is known best by the replica in the Vatican (Amelung, Sculpt. Vat. Mus. ii, pp. 636 ff.; Galleria delle Statue No. 414, pl. 57; BrBr. pl. 167). Beside the copies in Florence (BrBr. pl. 168) and in Madrid (EA. 1552) there exists a cast in several German museums, which it has been considered was taken either from the copy in the Vatican or the one in Madrid, before these were restored by artists of the eighteenth century. But WALTER MÜLLER in RM. 53, 1938, pp. 164 ff. has proved that the cast (fig. 1) is taken from a bronze cast made by Primaticcio for Francis I of France in 1540 (fig. 3), i.e., before the statue in Rome was laid with the upper part in almost a

sitting position on a rocky ground. The artist's conception of the original position of the statue must be accounted for in case the statue were lifted from the modern rock bed and reconstructed in its original condition.

Hellenistic Heads. - RUDOLF HORN in RM. 52, 1937, pp. 140-163, pls. 33-43 and 53; 1938, pp. 70-90, pls. 9-21 has published two instalments of research on Hellenistic heads, which have grown out of a paper inspired by Professor Arnold von Salis at Heidelberg. They are a continuation of the studies of Kramer, RM. 46, 1931, pp. 144 ff. and in Nach. Gött. Ges. N. F. I, 1936, pp. 217 ff. The first part gives an analysis of the heads in the smaller monument of Gauls, giants, Amazons and Persians, dedicated by the Attalids. Most scholars have dated these groups at the end of the third century, a date defended recently by B. Schweitzer in Sitz. Leipz. Akad. 43, 1936, pp. 97 ff., but the excellent investigations of Horn have now definitely proved that these groups belong in the period of Attalus II (159-138 B.C.; cf. also Schober in JOAI. xxviii, 1933, pp. 102 ff.). They are separated from the larger group by a development of style which leads beyond the heads of the great altar, with its new method of movement of the muscles and of the single features. Horn also proves impossible the attempt of Zschietzschmann, RE. xix, pp. 1255 ff. and Ant. Kunst 112, pp. 43 ff., who tries to date the great frieze of the altar in the period 220-200, together with the large Gauls, because the altar clearly belongs in the first half of the second century, the period of Eumenes II (197-159 B.C.). The smaller monument belongs shortly after the altar. The sequence thus is: large figures of Gauls, altar, small groups, Laocoon. Cf. also recently: V. K. Müller in Art Bull. xx, 1938, pp. 395; 397 f.; 403 f. He dates the large Gauls after the end of the wars in 228; the Gigantomachy, in the "balanced stage of the balanced period" and the smaller groups of Gauls in the time of Attalos II.

The strong Hellenistic tradition continuing in the east in the imperial period shows in a head from a relief, which Horn (p. 162 f., fig. 7, pl. 38, 2) wrongly places between the groups of Attalos II and the Laocoön. It is the fragment of a sarcophagus from Adalia, similar in type to the Achilles sarcophagus in Madrid (Robert ii, pp. 68 ff., No. 62, pl. 65; cf. Rodenwaldt, AA. 53, 1938, pp. 389 ff.). It is an Attic work of the second century A.D.

The second part deals with female heads, the date of which is based on coins (pls. 9-10), idealistic heads of Persephone, Demeter, Artemis on the one side, portraits of Ptolemaic queens on the other side, continuing and supplementing the studies of Pfuhl, JdI. 45, 1930, pp. 38 ff. The development in the third century B.C. goes from definite forms to softer ones, with toned-down transitions. In the first half of the second century a new way of rendering the hair with lively curves wound into each other develops. A turning point is reached about 130 B.C. on the coins of Cleopatra Thea, pl. 10, 12, with its dry and harsh execution, which continues into the first century B.C. (Caption of pl. 10 reads by mistake second and third, instead of second and first centuries).

With the help of this investigation a head from Egypt, now in Berlin, is dated in the beginning of the first century B.C. (pp. 78 ff., pls. 22, 11 and 17, 2), between the Aphrodite of Melos (pls. 15, 1 and 16, 2) and the Baebia of Magnesia (pl. 18, 2). To the same period belongs the Pudicitia from the Prytaneion of Magnesia (pl. 15, 2) and the relief of Lakrateides (pl. 19).

To the third quarter of the second century belongs a female head (p. 89 f., pl. 20) which probably has been sold in Rome to America. It is a Roman copy of an original of the period a little later than the great altar frieze and similar to the Polyhymnia, pl. 21, 2.

Marble Heads from Anatolia. - In Anatolian Studies Presented to William Hepburn Buckler, pp. 249-268, DAVID M. ROBINSON publishes three marble heads in his own collection in Baltimore, two of which are said to come from Dorylaeum, and the other from Rhodes. The first of these heads is that of a woman; it was in modern times sawn into two pieces, but is otherwise intact. The technique and marble indicate local Asia Minor workmanship, and the writer believes it to be a copy of a bronze statue, perhaps of Demeter, of the fifth century B.C., made in the reign of Tiberius, and adapted to become the portrait of a local noble lady, possibly a portrait funeral statue. It was not intended to be seen from the rear. An unusual feature is that the ears are pierced for earrings. The writer notices a number of other heads that show similar features. The second head is from Rhodes, and is an original of the fourth, or, more probably, the third century B.C. It is of a very coarse-grained Parian marble and, barring a few nicks, is intact. It is part of a statue of a youthful athlete, probably a wrestler,

wearing a victor's wreath. The technique is eclectic, showing strong Praxitelean influence, but with suggestions of Scopas and Lysippus as well. The closest parallels are a head in the Fogg Museum, and one in the possession of Prof. T. Leslie Shear (AJA. xx, 1916, pp. 283–298); in fact, it is believed that this head and the Shear head are by the same hand. The third head is that of a young woman and is a life-sized Roman portrait. It is of Asia Minor marble, well preserved, and of great beauty. The hair is dressed in the so-called "melon" style, and this coiffure tends to date the head in the first century B.C.

VASES AND PAINTING

Terracottas and Vases in Athens. - In BCH. lxi, 1937, pp. 349-363, S. Papaspyridi-Karouzou publishes objects in the National Museum hitherto neglected, recently acquired, or recently cleaned: (1) a woman's head in terracotta from Argos, first half of seventh century; (2) a woman's head in terracotta relief, "daedalic", third quarter of seventh century; (3) a man's head in terracotta, first century B.C.; (4) a fragment of a Melian relief; (5) a Protocorinthian vase in the form of a pomegranate, technically one of the best Protocorinthian vases; (6) a unique threealabastra-on-a-cylindrical-askos, Corinthian: (7) a fine Attic aryballos; a red-figured rhyton in the form of a sheep's head, Villa Giulia painter; (8) a pelike of ca. 460-450 showing Phrixos; (9) a Boeotian terracotta citharist of ca. 500-490, with coloring; (10) a terracotta head of a woman with Boeotian coiffure, ca. 490-480, with much color; (11) a Boeotian terracotta female figure, seated, likewise coiffured and colored.

Sophilos. - Semni Papaspyridi-Karouzou has published in AM. 62, 1937, pp. 111-135, pls. 43-66, a monograph on Sophilos. Up to date relatively few vases had been added to the signed lebetes from the Acropolis (pl. 51, Graef, i, 26, 587; Pfuhl, MuZ. fig. 202), Pharsalos and Menidi (pl. 53; Béquignon, MonPiot 33, 1933, pp. 43 ff., figs. 1-7 and fig. 12, pl. VI). Mrs. Karouzou adds tomb pinakes in the Vlastos collection at Athens, belonging to the earliest sixth century (pls. 48-50, 1) and about forty other vases. The list of works is given on pp. 132-4. The oldest belong to a period of Corinthianizing style, the middle ones to the high watermark or "severe style" and the latest to a decadent period, when Sophilos partly returned to his older preference of rows of animals. Thus the "Vourva"

vases were painted by him, partly in his first period (pls. 43-44, from Vari), partly in his floruit (pl. 45, from Vourva) and partly in his old age (pls. 59-62), one of which, perhaps considered to be a valuable heirloom, was buried in the tomb monument of Marathon (AM. 18, 1893, pl. II; CVA. Athènes, Nat. Mus. III, pl. 13, 1-2). The latest vases are monotonous and poor, in contrast to the pleasant polychromy, fine engraving and narrative style of his best period. Mrs. Karouzou adds to his earliest period also the works of the Gorgon painter (Payne, NC., p. 192; Pottier, Vases ant. du Louvre ii, pp. 81 ff., pl. 60), which she enriches with the fine plate in the Walters Art Gallery at Baltimore (pl. 65). Sophilos emerges from this study as the most important, perhaps the only important painter of his period. He introduces mythological subject matter in Attic vase-painting, his preference being the story of Achilles.

Red-figured Vases from Al Mina, Sueidia. -J. D. BEAZLEY publishes in JHS. lix, 1939, pp. 1-44, the red-figured vases found in the excavations conducted by Sir Leonard Woolley at Al Mina, Sueidia. The ware is all Attic. It does not become plentiful until well in the third quarter of the fifth century, and in the fourth century its importation increases. The most important vase discovered is a large calyx-krater, of yellowish clay, 61 cm. high and 55 cm. across, the finest in Beazley's opinion of all late Attic vases. Much is missing, including the handles. It appears earlier in date than the late Kertch calyxes. Below the scenes represented occurs a pattern that is unique, an alternation of flowers, anthemia rising from an acanthus calyx, and bucrania. The scenes show on the obverse the contest between Apollo and Marsyas, with attendant divinities, and on the reverse a four-horse chariot with Athena and Nike, both facing front, and again with other divinities present.

The Kleophrades painter.—J. DEN TEX (AM. 62, 1937, pp. 38–40, pls. 23–24) adds an amphora in Vienna, Austria, to the known works of the Kleophrades painter (Beazley, Bilder griech. Vasen vi, Der Kleophradesmaler, pp. 23–29). It has been attributed to Epiktetos, as a consequence of the wrong reading of a badly preserved inscription. This begins with an E, but has only five to six, not nine letters. The vase belongs to the early period of Kleophrades, when his work was close in style to that of Euthymides (cf. Beazley, p. 16). But the interesting enlarged

photo of the head (pl. 24) shows clearly that he cannot be identical with Euthymides.

Teisias. - In AA. 1938, cols. 68-77, J. F. Crome publishes two kantharos handles belonging to Göttingen University, remarkable for finger rests in the form of silens' heads, the beards of which serve the purpose of the normal spurs. Attribution to Teisias, Athenian potter resident in Boeotia, is permitted by the fine curves of the handle arch, such as are characteristic of Teisias' signed kantharoi (listed). Teisias is a not uninteresting figure. On the one hand, his inscriptions, less and less staunchly Attic, tell rather quaintly a story of acclimatization; on the other, his spirited transformation of a Boeotian shape shows him as a determined missionary of Attic taste. Two timid Boeotian imitations of the present plastic device are known. About 500 B.C., and not earlier, is Teisias' date.

Columnar Monument of Herakles. - There exist more than a dozen representations of a monument consisting of four columns erected on a base of three to four steps. They have been collected by Frickenhaus (AM. 36, 1911, pp. 113 ff.) and they are now revised and supplemented by O. Walter (AM. 62, 1937, pp. 41 ff., pls. 25-28). The most characteristic features are the facts that the epistyle does not sustain a roof and that there are no side walls. Thus it is a kind of pergola or arbor. On a vase in Athens, it is covered with olive twigs, and serves as an open-air triclinium or lectisternium to the feasting Herakles, who is served by satyrs (pls. 25 and 27). It is thus a shadowy skias or pavilion. On the same vase, as well as on the relief in Boston (Frickenhaus, pp. 121 ff., pl. 2; Caskey, Cat. of Sculpture, Museum of Fine Arts, Boston, pp. 102 ff., no. 47), a large vase in the shape of a dinos on a pedestal is another conspicuous feature. This may be the oinisteria (οlνιστήρια), the big wine pot brought in by the ephebes to Herakles according to Athenaeus xi, pp. 88 p., 494 f.

Tondo Composition in Archaic and Classical Greek Art.—T. B. L. Webster makes a study of Greek tondos over a period of four centuries, from the reign of Gyges to the era just before the accession of Alexander the Great, in JHS. lix, 1939, pp. 103–123. With the exception of the Strangford shield most of the tondos are of small size, varying from a foot to a quarter of an inch in diameter, on cups, plates, mirrors, and coins. The work is often of first quality and the tondos reflect the style and ideas of the period in which

they were created. Since permanence as well as change in decoration are to be found equally, the division of the circle by diameters and lateral symmetry extend straight down from the geometric age, and the various types of composition used repeatedly, such as the heraldic pair, the Union Jack, the triangle in a circle, are all based on these geometric principles.

Hellenistic Relief Ceramics. - OTFRIED DEUB-NER (RM. 52, 1937, pp. 245-255) publishes a medallion of terracotta with brown glaze, which he bought in Rome and which is a replica of a medallion from the same mould at Munich (pl. 53). Both represent Eos seizing the hunter Kephalos. The same motive reappears on an engraved mirror from Palestrina in Brussels (fig. 2). The original for the scene belongs to the time of Alexander the Great, while the mould for the reliefs, used as an emblema in bowls, probably comes from a Campanian workshop of the third century B.C. A similar style is found in a medallion from a black-glazed Calenian guttus (fig. 3) and in a silver-plated round bronze relief at Munich. They represent Dionysos fighting a giant, while another roundel of the same set at Munich represents Athena and Zeus, each fighting a giant (pl. 54). Similar round bronze reliefs, also silvered over, have been found in Southern Russia (fig. 4) and have been rightly interpreted as phalerae from horse trappings. This is true for the Munich pieces also. The date is fixed by the South Russian tomb as the period of Alexander the Great. The original invention of the design is put by Deubner ca. 400 B.C.

Epigrams of Antiphilos and Painting. - BERN-HARD NEUTSCH in RM. 53, 1938, pp. 175-188, investigates the relationship of three epigrams of Antiphilos of Byzantium to actual Greek painting. The one relating to a picture of Leda is of no value, but the two others can be used for the Medea of Timomachos and the Andromeda of Nikias, preserved for us in wall paintings from Herculaneum and Pompeii (figs. 2-3). Curtius (Wandmalerei, p. 306) and Horn (Stehende weibliche Gewandstatuen, p. 2, supplement to RM. p. 14) have recently tried to separate the standing Medea (Hermann-Br., pls. 7 and 130; Pfuhl, MuZ., figs. 660-1) from the Timomachos attested by Pliny xxxv, 136, for the period of Caesar, dating it in the early Hellenistic period. NEUTSCH (p. 180 f.) tries to solve the problem by doubting Pliny and putting Timomachos into the same early period and thus restoring to him the standing Medea. He rightly refutes the attempt of Bulle (Untersuchungen an griech. Theatern, p. 323) and Lippold (RE. vi A, 1294) to give to Timomachos the seated Medea (fig. 1; Hermann-Br., pls. 73–74), which he dates in the second half of the fourth century. This date and the relationship of the seated Medea to Aristolas of Sikyon is however absolutely unprovable. Bieber (Review of Religion 2, 1937, pp. 4 ff.) believes the standing Medea belongs with Timomachos in the time of Caesar, together with the frescoes of Boscoreale and the Villa Item, in a period which is the height of republican Roman Hellenism in Italy.

Mosaic in Malta.—E. Pfuhl in RM. 52, 1937, p. 275, relates some observations made before the original. The colors in JRS. 5, 1915, pp. 35 ff., 79 f., pl. 3, are to be corrected in so far as they are purer and lighter. The mosaic is a late Hellenistic copy of a painting belonging to the height of the Hellenistic period and represents a satyr attacked by nymphs.

Mosaics of the Seven Sages. - George Elder-KIN in RM. 52, 1937, pp. 223-6, defends the thesis which he presented in AJA. xxxix, 1935, pp. 92 ff., pl. XXII, against Brendel, who had attacked it in RM. 51, 1936, pp. 1 ff., figs. 1-2, pls. 1-5. Furtwängler (in Gemmen iii, p. 166), discussing a replica of the scene on a gem (Gemmen i, no. 35, pl. 35), was the first to give the generally accepted interpretation of the two mosaics from Pompeii in Naples and from Sarsina in the Villa Albani as the seven sages of tradition. Brendel, believing the content to be more important than the artistic form, interprets the single figures with Thales as the leader discussing the celestial sphere at the court of Periander of Corinth. Elderkin recognizes the citadel in the background as being the Acropolis of Athens and in the person to the left with the royal fillet Demetrius of Phalerum, surrounded by Menander, Theophrastus, Aristotle, Heraclides of Pontos and two other peripatetic scholars of his philosophical circle, represented in the terms of the old seven sages. He considers the grouping of the persons and their position in the near foreground as similar to the mosaic of Antioch with the judgment of Paris (pl. 49; cf. Morey, The Mosaics of Antioch, p. 28 f., pl. I), which also goes back to a late fourth-century Greek painting. The recently discovered pictures of the seven sages at Ostia (Guido Calza, Antike 15, 1939, pp. 99 ff., figs. 1-5), which are attested by inscriptions, do not agree with the types on the mosaic (Calza, op. cit., p. 105 f., fig. 16), thus also testify against the old interpretation of the latter as being the seven old sages.

INSCRIPTIONS

Omega in Sixth-century Inscriptions.—L. H. Jeffery points out in JHS. lix, 1939, p. 139, that the form 8, found in an inscription (at Phlius in 1924) and published by Scranton for the American School (Hesp. v, 1936, pp. 235 ff.) and interpreted as η is to be compared with a similar form occurring in an inscription from Asprókampo, near Perachora, namely 8, so copied by L. Ross (Arch. Aufs. ii, p. 661) and is to be regarded as an ω . These peculiar forms are perhaps the invention of one stone-cutter, who was responsible for both inscriptions.

Archaic Inscription from Dreros.—In BCH. lxi, 1937, pp. 333-348, P. Demargne and H. van Effenterre publish for the first time the oldest complete Cretan law yet discovered. Its 40 words form a decree prohibiting anyone from being kosmos more than once in a period of ten years, with a list of magistracies whose holders are to swear to observe the decree, namely the kosmoi, the damioi, and "the twenty of the city." Commentary on syntax (notably close to classical Attic), grammar, substance; no photograph. Rectification, BCH. lxii, 1938, pp. 194-195.

The Oath of the Drerians against Lyttos.—In BCH. lxi, 1937, pp. 327–332, H. VAN EFFENTERRE shows that this famous inscription is not a copy of an early boustrophedon text, as had been universally supposed, but an original document of ca. 200 B.C.

Epigram from Argive Heraion.—L. W. Daly, in Hesp. viii, 1939, pp. 165–169, publishes a Doric capital unearthed near the Argive Heraion, bearing a sepulchral epigram in the Argive alphabet, dated by its letter-forms and profile to the early years of the fifth century before Christ. The buried man, Hyssematas, died in a war, which the author proposes to identify as the invasion of the Argolis by Kleomenes, and which he dates about 494 B.C.

Notes on Attic Inscriptions.—Among five inscriptions discussed by Eugene Schweigert in Hesp. viii, 1939, pp. 170–176, two are of special interest. A section of the treaty of 433/2 between Athens and Philip is restored by comparing IG. i², 53 with IG. i², 87. Another inscription, IG. ii², 482, is restored to form part of a decree authorizing repairs to the statue of Athena Parthenos. The decree is dated in 304/3 B.C., and may refer

to the restoration of the Gorgoneion to the shield of the goddess, whence it had been removed.

Administration of Delos.—In BCH. lxi, 1937, pp. 364-379, J. Couper publishes two preambles, one of 410/9 (Tod, GHI., no. 85) and one of 408/7 ("new," found in 1886), which show Athenian amphiktyones in charge of funds, without any collaborators in 410/9, but with Delian episkopoi or epitropoi in 408/7.

Amphictyonic Accounts from Delos.—In BCH. lxii, pp. 85-96, J. Coupray presents new readings and restorations, mainly of chronological import, of BCH. xxxv, 1911, p. 5, no. 1.

Public Lands at Thespiae. In BCH. lxi, 1937, pp. 217–235, M. Feyel re-edits Δελτ. xiv, 1931–2, p. 26, no. III, which contains (1) a decree of the third century B.c. ordering the lands to be rented, (2) the names of the magistrates in charge, (3) regulations. A second section establishes the values of acrophonic numerals for Thespiae (two systems), Orchomenos, and Akraiphia.

Dedications by the Thespians.—In BCH. lxii, 1938, pp. 149–166, N. Platon and M. Feyel publish with full commentary a well preserved text of ca. 395–380 B.C. Objects are listed as being mostly "in the Heraion," a few "in Siphai," and a few "in Kreisus."

Honorary Decree from Eleusis.—JOHN THREP-SLADES, in *Hesp.* viii, 1939, pp. 177–180, combines *IG*: ii², 1274 and 1194, and an unpublished fragment in Eleusis to form a single decree. The man honored can now be identified as Euthydemos, son of Moirokles, a member of a distinguished Eleusinian family, the *stemma* of which is presented.

Thessalian Goddess Enodia.—By correcting the published text of a Thessalian dedication, P. A. CLEMENT, in *Hesp.* viii, 1939, p. 200, recovers the name Ennodia Pheraia. This establishes the "Goddess of Pherai" as Enodia, a deity of the Hekate type, later assimilated as Artemis Enodia.

Orchard of Herakles.—In BCH. lxi, 1937, pp. 380–409, M. Launey publishes a contract for the rental of an orchard at Thasos (and other parcels of land?), with commentary on the preamble, on the land and its irrigation, on the disposal of refuse, on sacrifices and military participation, on buildings, on payments and guarantees.

Inscription from Abdera.—In BCH. lxii, 1938, pp. 51-54, J. Bousquer publishes a late inscription dedicating a μάγαρον—the word appears here for the first time in a Greek inscription—to "god Dionysos." Full commentary.

Olbian Inscription CIG. 2080.—In the Museum of the Society of Friends in Wilno occurs an inscription engraved in seven lines on marble, measuring .22 m. x .26 m., a dedication to Achilles, which reads as follows:

'Αγαθῆι Τύχηι.
'Επὶ ἀρχόντων τῶ[ν]
Περὶ Π[ισίστρ]ατον
Δαδάγο[ν] . . . ωτας
Στεφάνο[ν] Ιερατεύσας τὸ δεύτερον
['Αχιλλεῖ] Ποντάρχηι

Although published three times before from copies by B. Latyshev the present publication is the first from the original stone recorded and analyzed by Nicholas Dzikowski in JHS. lix, 1939, pp. 84–91. The new readings correct the earlier erroneous copies, and the inscription is to be dated in the second century.

ITALY

GENERAL AND MISCELLANEOUS

Prehistoric Finds near Amiata.—A list of sporadic finds, chiefly stone and bronze implements and vases from sixteen places in the province of Grosseto. Vases of the Chalcolithic Period come from the Necropolis of Botro del Pelagone, from a tomb near Corano and from one near Poggio Formica. There is a pressing need for a systematic examination of the tombs of Corano and Poggia Formica, which doubtless will yield material for the study of the Chalcolithic Period in Etruria (A. Minto, BPI. ii, 1938, pp. 29–43).

Prehistoric Figurine from Jesi.—The author discusses a terracotta figurine, twenty-three cm. high, of pronounced ithyphallic type. It has a short, cylindrical body, protruding knobs for arms, facial features crudely represented, and lower limbs missing. It is somewhat akin to the figurine from Hagia Triada and to that of Tsangli. There is a remarkable scarcity of these male figurines as compared with the steatopygous female type. They may have had some religious significance, as symbols of divine nature or merely as deities of fertility. This is a native product, not an importation (E. Galli, BPI. ii, 1938, pp. 68–73).

Culture of Isnello.—The material from two caves, Fico and Chiusella, excavated in 1891 and 1896, is regarded by Collini as belonging to Per. I (of Orsi), as late neolithic or transitional by Peet, while Cafici considers it transitional but belonging

to a different group from that of Eastern Sicily and different from that of Western Sicily as represented in the finds from the Necropolis of Palermo. The Isnello material consists of bronze implements and four classes of sherds, large enough to indicate shapes. The author concludes that this culture is Chalcolithic and closely related to northwestern Sicily, but has some affinity to eastern Sicily. These two distinct phases correspond to the two areas, NW and SE Sicily, and support the tradition of two ethnic groups in the island. The southeastern material shows eastern Mediterranean influence, but the northwestern region was cut off by mountain barriers (A. Bovio Marconi, BPI. ii, 1938, pp. 44–56).

Terracotta Pyramids.—There are several terracotta pyramids in the Museum at Palermo, but two large ones, of unknown provenance, are of interest. They have an elaborate incised and stamped design (wavy lines, concentric circles, squares, etc.) which differs slightly on each of the four sides of the pyramid. The small holes in these heavy objects would not permit of suspension; nor are they like the usual type of weights. The author dates them between the eighth and the sixth century B.C. Three other small pyramids may have served as bases into which was set some slender object, possibly of bronze and of religious significance (I. Bovio Marconi, BPI. ii, 1938, pp. 74–82).

Location of Dripsinum.—The ancient Roman city of Dripsinum is probably to be located on the site of modern Trissino, northwest of Vicenza. Some of the epigraphical evidence which supports this identification is discussed by P. Fraccaro in Athenaeum xvii, 1939, pp. 171–177.

Related Sicilian and Etruscan Monuments.—Guido Libertini (Rev. del R. Istit. d'Archeol. e Stor. dell' Arte vi, 1937, pp. 20–31) describes four small terracottas found at Centuripe, Sicily, which he dates IV—II B.C.: a funerary group of two seated figures analogous to a contemporary pair in relief from Viterbo; two busts similar to a female bust from the "Grotto of Isis" near Vulci (VII—VI B.C.); a standing figure comparable to another from Vulci. This last and the busts are closely related to Syro-Phoenician works. Hence he sees further evidence here of Syrian origins for Sicilian and Etruscan art, and of subsequent diffusion from that source through slave movements and Phoenician trading.

Excavations at Apamaea.—In L'Ant. Class. viii, 1939, pp. 201-211, F. MAYENCE makes a

provisional report on the 1937 campaign at Apamaea in Syria. In this, their sixth campaign, the Belgian archaeologists continued the work of clearing several buildings previously discovered, and commenced an examination of the cemetery. The rich architectural remains, late Roman in date, include a great basilica, a synagogue, and a theater. Numerous mosaics were uncovered.

Palmyrene Boundary Inscriptions.—M. Dan-IEL Schlumberger's discovery and study of three Palmyrene boundary inscriptions constitute a welcome addition to our knowledge of Palmyrene-Roman relations (Syria xx, pp. 43–73). The boundary was fixed at Khirbet el-Bilaas (where two of the texts were found) between 11–17 a.d. and re-established there in 102 and again in December, 153. The boundary stone at Qaṣr el-Heir was erected under Hadrian or one of his successors.

Tertullian on Costume.—The passages in Tertullian's De pallio, which refer to costume, are examined by C. Albizzati in Athenaeum xvii, 1939, pp. 138–149. He discusses particularly those which throw light on the terminology used in connection with the toga, and those which are concerned with the manner of draping it.

ARCHITECTURE

Large Propylaea at Eleusis. - The entrance hall to the Eleusinian sanctuary has been attributed to the emperor Hadrian by Frazer (Pausanias ii, 105 f.) and Hekler (JOAI. 19/20, 1919, p. 232, no. 10; cf. pp. 229 ff.), or to Antoninus Pius by Dinsmoor (AJA. xiv, 1910, p. 155, note 1), Noack (Eleusis, p. 222), Kourouniotis (Guide to Eleusis 1934, pp. 24 and 31) and others. Dinsmoor and Kourouniotis saw already that the propylon had been finished by Marcus Aurelius, whose name appears in the dedicatory inscription. OTFRIED DEUBNER (AM. 62, 1937, pp. 73-81, pls. 39-42) has recognized the fact that the whole building must be attributed to him. Although Hadrian and Antoninus were interested in the mysteries, the relationship of Marcus to Eleusis is a much closer one, as he was himself initiated into the mysteries, together with Commodus, under the assistance of his friend and teacher. Herodes Atticus. Moreover, the large medallion in the pediment of the entrance hall represents indeed Marcus, as Deubner has proved. An important detail is the giant on the shoulder strap, which recurs also on the bust of Marcus in the Louvre (pl. 42). This symbolizes his enemies, the barbarian Marcomani, whom he defeated in 172/3. Marcus himself, with the head of Gorgo on his breast, is likened to Jupiter, who destroys the giants. The features of the face of the bust agree much more with Marcus than with Antoninus or Hadrian. We know already that Marcus had rebuilt the temple when it was destroyed in 170 a.d. by the Sarmatians. We know now that he also rebuilt the great propylaea. His portrait on a shield was put in the center of the entrance hall instead of apotropaic heads of Medusa, or shields with votive inscriptions or emblems, combining both in the imago clipeata. Such medallions were first used for the heads of gods and in the later imperial period for important personalities also.

Lighthouse of Ostia. - Hermann Thiersch, Pharos, 1909, investigated the celebrated lighthouse of Alexandria, using all material available. Some of this and other reliefs on coins, architectural slabs, tombstones, sarcophagi, mosaics and lamps have been used by G. Stuhlfauth (RM. 53, 1938, pp. 139-163, figs. 1-15, pl. 31) in order to reconstruct conclusively the monumental lighthouse erected by the emperor Claudius (41-54 A.D.) at Ostia. The lighthouse had four stories, built of large square stones. The three lower stories are square, the uppermost rounded. Each story recedes considerably against each lower one and each is lower than the one below it. A large vaulted entrance led into the lowest story, the two following had windows, while the uppermost was closed, because from it there issued the big fire to lighten up the entrance to the harbor at night. Thus Ostia had the first genuine lighthouse in the world, the three-storied pharos of Alexandria being originally only a landmark in daytime. Though Alexandria gave the model for Ostia, a burning fire for night use was given to the pharos only after the one in Ostia had been erected.

SCULPTURE

Bona Dea.—A. Greifenhagen in RM. 52, 1937, pp. 227–244, figs. 1–8, pls. 50–52, gives a list of representations of Bona Dea in statuettes and altars of the first and second century A.D. The name is given by inscriptions on a lost statuette and a lost fragment (no. 1, fig. 6 and no. 10). The type is that of a seated matron with a horn of plenty on her left arm, a snake around her right arm and a bowl from which the snake is fed in her right hand. Her temple was on the slope of the Aventine hill and she was venerated as a goddess of healing and of fertility

(Wissowa, Religion und Kultus der Römer, 2, pp. 216 ff.). This explains why she combines the attributes of the Greek Hygeia and Agathe Thea (᾿Αγαθὴ Θεά οτ Θεός, pl. 50, 2) or Agathe Tyche. The artistic model may have been Bona Fortuna (Agathe Tyche) by Praxiteles, on the Capitoline hill (Pliny 36, 23). This statue stood, together with the Bonus Eventus (Agathos Daimon) of the same artist, which may have been the model for the genius, represented together with Bona Dea on the altar in Naples, pl. 51.

Statuette of a Pantheress. - R. Heidenreich in RM. 52, 1937, pp. 266-274, pl. 39, discusses a pantheress published by Curtius in Pantheon 1936, pp. 147 ff., now in the Bliss Collection at Washington (Masterbronzes from Collections in America, no. 97). HEIDENREICH dates the original ca. 400 B.C. and assumes the bronze is a copy from a group on a column over the tomb of the courtesan Lais at Corinth, represented on coins (p. 269, figs. 1-5). This would account for the peculiar movement of the legs, as on the tombstone a ram is harassed by the animal. Pausanias ii, 2, 4 describes the animal on the tomb of Lais as a lioness, but the coins are in favor of the interpretation of Heidenreich as a pantheress. A Roman "Trimalchio" had the queer idea to have a copy of the tombstone of a courtesan made into a gargoyle for pouring wine.

Portraits of Roman Boys.—Goffred Ricci in RM. 52, 1937, pp. 256-60, publishes three heads of children discovered at Ostia, the harbor town of Rome. One (figs. 1-2) is the head of a sickly infant of the Julio-Claudian period. The second (pl. 55) is the statuette of a robust baby of the Trajan period. The third (pl. 56) is the head of a young boy from the fourth century A.D. Each is a masterpiece of its period and of Roman art in portraying children.

Venus from Aenona.—In Athenaeum xvii, 1939, pp. 50-53, E. Galli describes a statue of Venus found at Nin, the ancient Aenona, in Dalmatia. It is a Roman copy of a common Hellenistic type, with the lower part of the figure draped and a small Silen standing by the left leg. An inscription of the second-third centuries A.D., found with the group identifies it as a dedication to Venus Ansotica. The epithet, hitherto unrecorded, is probably a local Illyrian one.

Spurious "Trajanic" Relief. — The relief from Terracina, thought to represent the building of a lighthouse by Trajan, is not antique, according to W. H. Gross (AA. 1938, cols. 148-155). Signs of

spuriousness: the touch of anachronistic caricature in the workmen, the flabby drapery, the feeble repetition of types, the namby-pamby attitudes of certain bystanders, the "high renaissance" posturing of Trajan, a solecism in his costume.

Fragment from Column of Marcus Aurelius.—
The base of the Aurelian column has been mutilated and denuded of its outer casing. Drawings of the Renaissance show, however, on the fourth course above the entrance side the homage of two vanquished Germans to the emperor. H. Fuhrmann in RM. 52, 1937, pp. 261–65 has recognized in a fragment in the Museo Nazionale Romano the left-hand part with the head of the last and the shoulder of the first chief, against shields in the background, which belong to the soldiers guarding the kneeling chiefs, all agreeing with the prints of Piranesi and Enea Vica (pls. 57–58).

Art of the Age of Diocletian. - This period is dealt with in two articles in RM. 53, 1938, by L'ORANGE, pp. 1-34 and by Fuhrmann, pp. 35-45. The most important monument of Diocletianic sculpture is the base in the Roman Forum, commemorating the triumph of Diocletian and his colleagues in 303/4 A.D. It is called the Decennalia basis, from the inscription on its rear side: Caesarum decennalia feliciter (CIL. vi. 1204; L'ORANGE, fig. 1 and pl. I), on a shield carried by two victories and surrounded by prisoners and trophies. The front side (figs. 3 and 6, pl. 3) represents a sacrifice of an emperor, crowned by Victory and the genius of the senate, attended by a flute-player, a priest and a camillus. Present are Mars and Roma, who is unveiling herself from a cloak, the folds of which reveal the head of Sol-Mithras, thus representing the sky. According to L'Orange, the sacrifice is performed by Constantius Chlorus. It is taking place on the Campus Martius and was combined with the lustratio, indicated by the animals of the suovetaurilia on the left side (fig. 2 and pl. 2) and the procession of four togati, accompanied by a boy and four officers carrying signa with clipei votivi (figs. 4 and 7, pl. 4). These are the Caesares of the triarchy, who celebrated the vicennalia Augustorum and the decennalia Caesarum in 303. The signa relate to the formations of the emperors Diocletian, Maximianus and of the Caesares Galerius and Constantius Chlorus. This base was one of five, of which two more have been discovered in previous times (pp. 20 ff.), one with the inscription Augustorum vicennalia, the other with the inscription vicennalia Imperatorum (fig. 8). This must have been the one in the center, while the two others must have had lost counterparts for the other emperor and the other Ceasar. Such a monument of five Corinthian columns, with the statue of Jupiter in the center, the statues of the emperors and Caesars on the others is represented as a background to the "oratio of Constantine on the rostra," in the relief on the arch of Constantine (fig. 9; cf. L'Orange, Der spätantike Bildschmuck des Konstantinsbogens, pp. 81 ff., pls. 5 a, 14 b, 15 a, 21 c and d). The statue of Jupiter reappears on contemporary coins (pl. 8, 4). Thus L'ORANGE sketches a reconstruction of the entire monument (fig. 12), with Jupiter on the central column, the two emperors on the columns at the sides and the two Caesares on the columns to the extreme right and left. The importance of the monument for the history of art L'ORANGE has already pointed out in his former study: Der spätantike Bildschmuck des Konstantinsbogens, pp. 207 ff. To his bibliography, p. 1, note 1, there is to be added: E. Strong, Art in Ancient Rome ii, p. 178.

Fuhrmann discusses the portraits of Diocletian. We have definite likenesses on his coins (pl. 8, no. 1 and 6), in an imago clipeata in his mausoleum at Spalato and two porphyry reliefs in the Vatican and at San Marco in Venice (L'ORANGE, Studien zur Geschichte des spätantiken Porträts, pp. 16 ff., figs. 32-35 and 39. Delbrück, Ant. Porphyrwerke, pls. 32-36). A togatus in Villa Doria Pamphili has been identified as Diocletian by L'ORANGE (RM. 44, 1929, pp. 180 ff., pls. 37-39). This is now justified by a newly identified portrait on a herm, formerly in the possession of the Danish sculptor Jerichau (figs. 1-2), which is similar to the head of a statue in the Villa Doria Pamphili (fig. 3). Both are very massive and square, in the style of the period ca. 300 A.D. The head once owned by Jerichau is combined in a double herm with a head of Kronos-Saturnus (fig. 4). This combination alludes to the golden age, which Diocletian as before him Augustus and other emperorswere supposed to bring to the Roman empire.

Late Roman Portrait.—A. M. Schneider publishes a marble bust exhibited in the entrance hall of the Byzantine Museum at Athens, in AM. 62, 1987, pp. 70–72, pl. 38. It represents ICBAPDIA, a peculiar name which is neither Greek nor Semitic. It is a half bust, in the style of the fourth century A.D., neglecting the body in favor of the dress. The mantle is drawn over the head, and on

top of it is a kind of torque and still above this an olive wreath. The bust is said to have been found at Smyrna. It may be the portrait of a priestess of one of the many mystery cults in this city.

INSCRIPTIONS

Epigraphical Evidence on C. Marius.—In an attempt to throw light on the career of Gaius Marius, A. Passerini (Athenaeum xvii, 1939, pp. 54–77) makes a detailed examination of the following inscriptions: CIL. i², XVII and XVIII; SEG. iii, 378, p. 78; Inscriptiones Italiae xiii, 3, 7; CIL. iii, 7241; IG. xiv, 1297.

Official Rescript from Corinth.—OSCAR BRON-EER, in *Hesp.* viii, 1939, pp. 181–190, publishes a fragment of a rescript, apparently from a Governor of Achaea of the first century A.D. By comparison with an inscription from the Isthmia, *IG.* iv, 203, this fragment is shown to refer to the plan of P. Licinius Priscus, a local aedile, to erect buildings at the Isthmia in fulfilment of campaign promises. The prescript gives him permission to buy sacred land on which to build.

The Priests of Panamara.—In BCH. lxi, 1937, pp. 236–298, A. LAUMONIER lists in order 172 priests with complete details, including extensive genealogical tables. All but seven priesthoods date from the period of the Roman Empire. Complementary notes, BCH. lxii, 1938, pp. 167–179.

Latin Inscriptions from Philippi.—In BCH. lxi, 1937, pp. 410-420, P. Lemerle publishes 16 new texts; index of names.

Dedication of 202 A.D. from Philippi.—A pentapolis, hitherto unknown, Hadrianopolis, (B)e(r)ga, Skimbertos, Gazaros, and (-----), commemorate a sacrifice to the imperial house. Hadrianopolis and Skimbertos are cities new to us (J. ROGER in BCH. lxii, 1938, pp. 37–41).

NUMISMATICS

Dura.—The eighth and ninth Dura hoards are studied by A. R. Bellinger in NNM. 85. Though found at different times, they belong together and are so treated. The hoard seems to have been assembled about 202 a.d., but contains several much worn pieces of an earlier date, and runs to about 250 a.d. There is a wide diversity of mints, from cities of Pontus in the north to Cyprus and Syro-Phoenicia in the west. Important types are the Tyche of Antioch, the pyre of Amasia, and the tetrastyle temple of Neo-Caesarea. There are 396 bronze pieces mostly of the large size.

Roman Tetradrachms.—Henri Seyrig (Syria xx, pp. 39–42) shows that a group of tetradrachms from the reigns of Tiberius and Nero comes from Latakia and that the abbreviation ΣAN, found on some of them, stands for Sandan, a magistrate whose name is based on that of the chief god of the city. Another group of tetradrachms, characterized by a crab and crescent, comes from Gabala, because one such coin (p. 41) has the additional symbol of the date-palm, which, according to Seyrig, is appropriate to Gabala.

EARLY CHRISTIAN AND BYZANTINE

Abbey of St. Mary. - While digging a trench down the Kidron Valley for a new Jerusalem sewer, two superimposed pavements were brought to light a short distance to the west of the Church of the Tomb of the Virgin. The lower mosaic pavement can be dated by a tombstone to the sixth century A.D. and probably belonged to a Byzantine monastery. The upper pavement is definitely Crusader work, as is proved by the dressing of the stones and other architectural details. The mosaic border is of a mixed composition, such as is found in the neighboring Crusader church at Gethsemane and in the north arm of the crypt of the Church of the Tomb of the Virgin. Evidently the Crusaders made use of materials from an earlier Byzantine structure. The position of the recently discovered upper pavement and its date make it practically certain that it is a part of the great Abbey of St. Mary in the Valley of Jehoshaphat, which we know was erected by the Crusaders in the twelfth century beside the Church of the Tomb of the Virgin. Combining the scanty material evidence with a respect for the limitations imposed by the topography of the site, C. N. Johns presents us with a conjectural restoration of the plan of the abbey (QDAP. viii, pp. 117-136).

The Sarcophagus of Sidamara.—G. W. ELDERKIN, in *Hesp.* viii, 1939, pp. 105–115, traces the type to an Athenian original of the fourth century B.C. The figures on the front represent the deceased person, the Spartan underworld triad of Helen and the Dioscuri, and Artemis, who is associated with them. The original may have been ordered from Athens by a person of Spartan descent living in southern Asia Minor.

Churches at Bosra and Samaria-Sebaste.— J. W. Crowfoot in *JHS*. lix, 1939, p. 139, corrects an error made by the reviewer, J. M. R. Cormack in *JHS*. lviii, 1938, p. 287, of Crowfoot's book dealing with churches at Bosra and Samaria-Sebaste, to the effect that at Bosra there was no trace of any composite pier, the base of which Butler was said to have found in 1909.

Byzantine Pottery.—D. Talbot Rice calls attention in JHS. lix, 1939, pp. 138–139, to an article in Ars Islamica v, pp. 55–86, 1938, by Miss du Platt Taylor on "Mediaeval Graves in Cyprus," in which a large quantity of late Byzantine pottery is published, dating in the fourteenth and fifteenth centuries.

MEDIAEVAL

Eleventh-Century French Sculpture.—Henri Focillon (BullMon. 97, 1938, pp. 49–72) briefly surveys eleventh-century sculpture in northern France, emphasizing the importance of the schools of the Loire Valley and Normandy. The stylepeak of this period, represented here by the rondpoint capitals of Morienval, arose from roots in Spain and Ottonian Germany and developed in such centers as Dijon, Paris, Orléans, Angers, Lavardan and Le Mans. Norman and Catalan influences he considers as inseparable problems, but he does not discuss them here.

RENAISSANCE

Lost Painting by Hans Baldung.—A collection of woodcuts of famous men by Bernhard Jobin (Strassburg, 1587) includes a portrait of Jacob Sturm, a leading figure in Strassburg. Carl Koch (MJb. xiii, 1938–39, pp. 107–13) regards this, and a portrait by a Strassburg master done after Sturm's death, as based on a lost painting by Hans Baldung. Both works show characteristics of Baldung's style.

Le Nain Forge of Vulcan.—In the Château d'Effiat is a painting of the Forge of Vulcan, traditionally attributed to Mathieu and Louis Le Nain, but not previously mentioned in literature on the Le Nain. This attribution seems actually to be correct on the basis of comparison with a similar subject in the Rheims Museum. Pierre Du Colombier, in GBA. 1939, pp. 30–38, concludes with a discussion of the iconography of the scene and its representation in art.

Michelangelo's Descent from the Cross.—In Dawna Sztuka ii, pp. 111–120, KAROLINA LANCK-OROŃSKA discusses the Descent from the Cross of Michelangelo. This group was made between 1547 and 1555 and shows that influence of mediaeval Italian art, which was so often felt in the later

works of the artist. The sculptor underwent certain religious moods, which are reflected in the work. It is especially to be noted that Nicodemus has the features of the sculptor and this tradition was continued later by Caravaggio, who gave to Nicodemus in the Laying in the Coffin the features of Michelangelo.

Tadeusz Kuntze.—In Dawna Sztuka ii, pp. 121–130, Maciej Loret discusses the ability of Tadeusz Kuntze in Rome. He adds to the pictures hitherto known the panels in the Hall of Dominiquin in the Gallery Borghese, in one of which the artist represented two Polish musicians. It is very probable that panels in other halls are also his work, but this cannot be decided definitely.

The Work of Giacomo Amato.—Luigi Biagi (L'Arte, N.S. 10, 1939, pp. 29–48) reviews sixteenth-century architecture at Palermo, to clarify the local influences which tempered Giacomo Amato's work. The architect's work at Rome and Palermo is historically and aesthetically criticized.

FAR EAST

Musulman or Iranian Art.—In Rev. des Arts Asiat. xii, pp. 20-31, Eustache de Lorey takes issue with the theory of Ivan Stouchine concerning the origins of and the influences on Abbassid painting in Iran. De Lorey claims that the style is not completely homogeneous and not mainly dependent upon Sassanian art. He shows the importance of Islamic culture and points to stylistic affinities between the art of Central Asia and that of Iran under the Abbassids.

Afghanistan.—In Rev. des Arts Asiat. xii, pp. 2–11, J. Hackin summarizes the activities of the French Archaeological Delegation in Afghanistan for the season September 1936–August 1937. Work was mainly done at Begran, the ancient Kāpīsī, and in the district of Chakansur, ancient Seīstan. The more important monuments discovered are described and dated with reference to existing material.

Painting in East Turkestan.—In Ostasiat. Zeitschr. 14, 1939, p. 83, Denes Sinor makes a comparison of various features of paintings from Turfan, now in the Museum für Völkerkunde, Berlin, with literary sources and seeks to date the paintings in the Mongolian period, i.e., after 1209, and thus prove his contention that the period of Buddhistic painting in East Turkestan extended considerably beyond the chronological limits now accepted. He arrives at his conclusion by a com-

parison of clothing, coiffure, and proportions of the figures, with descriptions of Mongolians given by two travellers, Johann de Plano Carpini and Wilhelm von Rubruk, who visited Mongolia between 1245 and 1255.

Chinese Sculpture.—In Ostasiat. Zeitschr. 14, 1939, p. 65, Ludwig Bachhofer seeks to throw some light upon the history of Chinese sculpture from the eighth to the fourteenth centuries. Owing to the extreme scarcity of dated monuments, this period has always presented many problems. Attention is called to the chief questions involved, a few of them are studied in detail, and some attempt is made to show an orderly development of style. In particular the author discusses five wooden seated figures brought to Japan from China in 847 and now in Toji, Kyoto.

U.S.S.R.

History of Material Culture of the Academy of Sciences, U.S.S.R., publishes in its first Report a survey of archaeological explorations made in 1938 in the U.S.S.R. The most important results are: studies of the cities of the Crimean Bosporus before the Greek settlements in the sixth century, B.C., studies of a Central Asian culture perhaps centering at Khoresm, which seems widespread and distinct from the Iranian culture, and studies of the three settlements which were later combined to form the city of Kiev.

Sovietskaya Arkheologiya. - The first archaeological journal of post-tsarist Russia began with its very promising No. i, 1936, 305 pp., and was followed in due time by No. ii, 1937, 243 pp., which shows a material improvement over the initial volume. The "Soviet Archaeology" is published by the U.S.S.R. Academy of Sciences, Institute for Anthropology, Archaeology, and Ethnography. Both volumes open with extensive editorials on aims, tasks, and statements of policy. While a great deal of what is said on behalf of tasks and aims and in the way of criticism concerning past and present methods in Russia and elsewhere is justified, there is much to be taken cum grano salis. To blame bourgeois methods for atrocities committed on kurgans will hardly impress those who are aware of the existing deplorable field procedure of some archaeologists in Russia. Especially striking, if not obnoxious, is the insistence (II: 1-15 sic!) on a scrupulous application of and obedience to "the Marxist-Leninistic method." Apparently, it should be consid-

ered either treason or sacrilege for a "scientist" in Russia not to respect and revere this "method" which, incidentally, is not even explained. Yet it seems that the editors are not without an objective appreciation of the scope of archaeology as a historical discipline. Above all, however, the reader finds relief from the obviously tinted editorials in the individual original contributions, reports, the extensive chronicles listing current field work and discoveries, and reviews. It will please many, no doubt, to find a French résumé accompanying all original contributions and materialia. (Incidentally, it is only these two categories of articles that are summarized here on this occasion. The chronicles contain appalling numbers of events which could not very well be abstracted without taking undue space.) The paper, so often a discouraging feature in recent Russian publications, is good, and so are the illustrations, which have improved with the second

Rock Drawings At Lake Onyega. - In ibid. pp. 9 ff., V. I. RAVDONIKAS describes the long known, but hitherto very little published rock drawings found in North Russia. They were executed with stone tools, by a technique combining initial pecking followed by furrowing, and date from the Neolithic period, as suggested by settlement sites explored in the immediate vicinity. The drawings include figures of birds, quadrupeds, man, and also certain presumably symbolic representations. They serve as an aid in reconstructing the ecologic, economic, and social conditions of their original makers. The variety of composition induces the author to think that the drawings represent different periods of "social thinking" and he concludes that an analysis of such periods, or "palaeontology of thinking" (p. 46), will open the way for a proper study and evaluation of rock drawings.

Pottery Making Technique.—In *ibid.* pp. 51 ff., M. E. Voevodskij, despite a cumbrous title, offers a valuable treatise, quite objectively motivated, on a subject heretofore sadly neglected not only in Russia, but in the Old World in general. The author's chief concern centers on the so-called "pitted and combed" pottery (a misnomer) which has a wide distribution in the northerly zone of Russia in Europe, in Siberia, and also in the woodland area of North America (as yet, however, unknown in Alaska and in the Mackenzie region). Inasmuch as the true state of relationship and the question of chronology regarding the many links in this vast geographic span are very

little known thus far, a technical study contributing reliable, objectively determined tectonic and other technologic details is, of course, most welcome. Voevodskij has done very well indeed in his approach to the subject by dealing only with the Neolithic material. He recognizes only one technique of construction as commonly and constantly typical. This implies segmental construction on the course of a continuous spiral which depended on tectonic components in the shape of fillets-in the case under review 6 cm. to 9 cm. long. The described and illustrated criteria are convincing enough to establish the practice of true coiling at the various sites which supplied the author's study sherds. It will be interesting to know whether or not the annular variants (circuit, ring) or the laminated moulding construction identified in America (cf. Amer. Antig. iii, 1937, pp. 143 ff.) also existed in the Old World. Especially instructive are the so-called "combs" of stone and bone-in reality stamping toolsused for the execution of the impressed decoration. In America only one such tool, of stone, has been recorded (cf. Amer. Antiq., ibid.).

The Treasure of Podcharema. - In Sov. Arkh. ii, 1937, pp. 113 ff., V. A. GORODTSOV describes a treasure accidentally discovered by a geology student in 1929, in the far northeastern corner of European Russia. The find, comprising some seventy well preserved specimens, is now in the Hermitage Museum. The author divides the material into two categories: domestic and cult objects. The first group comprises chiefly articles of adornment and general utility; the cult objects consist of animal figures, plaques with portrayals of mythical creatures, symbolic presentations, etc. Local as well as Persian elements are obvious in the motifs; Sassanian details are particularly striking. Gorodtsov dates the treasure as of the beginning of the 4th century, approximately corresponding with the reign of the Sassanian king Hormusdas, i.e., 303-309.

Kurgans at Kuznetsovka (Moscow Region). — In Sov. Arkh. i, 1936, pp. 247 ff., S. V. Kiselev describes his excavations in ten tumuli situated northward of Moscow. The earthen accumulation varied in height from 0.5 m. to 1 m., and in basal diameter from 6 m. to 9.5 m. The graves contained skeletal burials, placed in elongated pits and accompanied by ceramic and metal furniture. The constant orientation of the skeleton from east to west, the funerary arrangement, as well as the furniture, clearly bespeak a Slavic provenience.

The author suggests the Krivitchi and Viatitchi, who are recorded to have occupied this area during the eleventh and twelfth centuries.

Microlithic Station at Urtuya. - In ibid. pp. 105 ff., V. A. Goroptsov gives a brief report on the discovery of a site in the Amur River Basin and the results of its initial exploration. The lithic finds comprise a series of thumb and blade scrapers, triangular projectile points, knives and gravers of blades, as well as core pieces. On the whole, the various types are closely reminiscent of the more or less standard Western European types characteristic of the Microlithic industry.

The Cemetery at Likhatchevo. - In Sov. Arkh. ii, 1937, pp. 19 ff., O. N. BADER discusses the finds from the "gorodishte" and cemetery of Likhatchevo, region Kalinin (old Tver), originally obtained by Makarenko in 1903. The cemetery was located within the roughly oval stronghold surrounded by two embankments and two ditches. Makarenko opened six graves. A re-examination of his finds, which were inadequately published by him in 1904, has enabled Bader to reach several interesting deductions. The site belongs to the Fatiyanovo phase of the Bronze Age. The material remains furnish important light on the economic status of the aborigines, who had agriculture and domesticated animals, and who apparently added to their food supply by hunting reindeer. The physical environment had changed from forest to grass land, and thus facilitated the establishment of a sedentary economy which did not develop fully until the Bronze Age proper (i.e. the Fatiyanovo phase).

Neolithic Fish Weirs. - In ibid. pp. 61 ff., V. V. Fedorov re-examines the finds of wooden posts, originally made by Polyakov in 1878 (published 1882). The posts are said to have been found partially in their aboriginal position, apparently forming a circle. Polyakov also found fish bones within the circle and concluded that the contraption was originally used as a fish weir. Kiselev upholds this view, and having further studied the terrain, where he found traces of a Neolithic settlement, and having done some inductive experiments in dressing wooden posts with stone tools, assigns the weir definitely to the New Stone Age. He adds several germane comparisons of fish trap and weir construction still practiced among contemporary aborigines in various parts of the

world.

Western Volga Region in First Millennium A. D. -In ibid. pp. 39 ff., P. P. EFIMENKO publishes a brief summary of his large work, now in progress, dealing with the area between the Volga, Don, and Oka. In the present article, his chief emphasis is on cemeteries. During the first half of the millennium, the author envisions a pastoral rather than an agricultural economic basis. The latter half, in his opinion, marks the presence of strictly agricultural settlers. Definite Slavic occupation of the area is not documented until the eleventh century.

Crimean Expedition, 1935.-In Sov. Arkh. i, 1936, pp. 195 ff., C. N. Ribikov deals with the exploration of the rock shelter of Shai-Koba, situated in the Baidar river valley, Crimea. Three cultural niveaus were found: (I) The top layer with humus, containing Bronze Age material with typical pottery; (II) Levels 2 and 3, forming a complex, and characterized by Tardenoisian flint industry; (III) Levels 4, 5, and 6, again a distinct complex, with either ancient Tardenoisian or Azilian flint industry. The nature of the several depositional horizons was such as to permit precise following of the individual levels. In addition to a large number of representative flint and bone specimens, which help to reconstruct the activities of the aborigines, the site yielded valuable ecologic and economic evidence in large quantities of snail shells (Helix vulgaris) which were used for food.

Date of Scythian Tumuli. - In ibid. pp. 79 ff., B. Rabinovitch re-examines the evidence which originally induced Rostovtzeff to date the tumuli in the Middle Dnieper region in the 3rd and 2nd centuries B.C. The author, basing his deductions on the mode of the funerary customs, and especially on types of mirrors and other furniture, comes to the conclusion that at least some of the sepulchral kurgans of the Scythian period on the Middle Dnieper go as far back as the sixth century B.C.

Cemetery on Kuban River.-In ibid. pp. 159 ff., M. V. Pokrovskij reports the chance finds made in the process of clay cutting for the manufacture of bricks. The Pashkovskaya material consists of brooches, a mirror, a bracelet, a necklace, individual beads, and pottery. Most of these specimens suggest a close affinity with Gothic grave finds in the Crimea, and the author dates them into the 5th and 6th centuries. It appears that a settlement may have existed at the site during the first and second centuries. Pokrovskij intends to investigate the locality further in order to be able to reach more conclusive deductions.

Excavations at Ielizavetinskaya, 1935. - In ibid. pp. 171 ff., V. A. Goroptsov gives a preliminary report of the explorations of the "gorodichte" and cemetery of Ielizavetinskaya, near Krasnodar, which began in 1934. The stronghold contains well preserved fortification features and remnants of habitations which attest the former existence of rectangular houses (dimensions about 5.5 m. by 7 m. in ground plan). The deposits are rich in artifacts of metals, bone, stone, and pottery, as well as in animal bones. The artifacts represent articles of personal adornment, agricultural and industrial implements, and weapons; twenty-two Panticapaean coins are reported to have been found. Particularly interesting are the remnants of baking ovens, originally constructed of clay, which apparently have been so well preserved as to permit detailed reconstruction. In the cemetery, ninety-five burials have been excavated thus far. They are invariably skeletal, and contain chiefly metal and ceramic furniture. No details are given in the preliminary report. A chariotburial of a warrior had with it a Panathenaic amphora which the author dates about 425 B.C. Ethnically, the Sarmatians are suggested; indeed, Gorodtsov deduces this stock from the skeletal remains alone.

Excavations in the Tumulus Field at "Three Brothers."-In ibid. pp. 115 ff., P. S. Rikov describes the work and finds of the 1933 and 1934 excavations at "Three Brothers," at which time two of the four groups of tumuli were explored. The individual mounds varied in size from small rises to as much as a height of 5 m. and even 7 m., and in base diameter they attained an extreme of 65 m. They represented several periods of culture history. The oldest dated from the Bronze Age and contained well preserved pottery analogous with the Khvalinsk ware. The Sarmatian graves of the 2nd and 3rd centuries have yielded especially instructive material regarding distant trade contacts. In addition to sundry burials of the nomads of the 11th and 12th centuries, there were also interments of 14th century Mongols. It appears that the Kalmik steppe region may be expected to reveal a very interesting archaeological history.

Cemetery at Ananino (Tatar Republic). - In Sov. Arkh. ii, 1937, pp. 95 ff., A. V. ZBRUEVA reports the results of his recent excavations in the well known cemetery which first commanded the attention of archaeologists as early as 1858. The site is situated upon a dune which has suffered much seasonal erosion by the Kama river. Zbrueva found one intact grave with a male skeletal burial in an elongated pit; the furniture included a socketed bronze celt (hexagonal), a lance head and a knife blade of iron, a bronze spiral, a bronze torque, and two femurs of a horse. This grave belongs to the so-called Ananino phase of the Middle Iron Age, which Tallgren dates between the seventh and second centuries B.C. Zbrueva also found a hitherto unnoticed deposit containing sherds which suggest the possibility of an earlier, perhaps Neolithic, settlement.

Fish Images of Stone.—In Sov. Arkh. i, 1936, pp. 215 ff., A. P. Okladnikov describes the recent archaeological investigations in Neolithic sites of Eastern Siberia and the Baikal region. This work resulted in the collecting of many stone figurines, both anthropomorphic and theriomorphic, among which the fish is particularly numerous. The individual specimens, 18 cm. to 25 cm. long, are quite realistically executed, and represent the local varieties of fish. The author considers various possibilities in so far as their original function is concerned, and concludes that they were most likely used in actual fishing, as is still the case with some contemporary aborigines of Siberia.

Tumuli at Sida and Tesi, Minusinsk.—In Sov. Arkh. ii, 1937, pp. 71 ff., S. V. Kiselev describes his recent finds in twelve sepulchral tumuli on the middle Yenisei river. They represent the so-called Afanasievo phase of the Bronze Age, which the author dates in the third millennium. The individual graves contained from one to eight skeletons, invariably contracted; their covering heaps had a diameter of 7 m. to 11 m., and a height of 0.5 m. to 0.8 m. The funerary furniture was rather poor, except for pottery, of which a fine series of representative specimens was obtained. The author sees close analogies for his finds in the Altai area and also in Kazakstan.

V. J. FEWKES

NEWS ITEMS FROM ATHENS

In these days when wartime restrictions will undoubtedly cause a lessening, if not a complete cessation of archaeological activities in Greece, it is encouraging to look back over this past year with its unusually rich succession of important finds from all regions of the country. Beginning with the stunning bronzes of the autumn campaign at Olympia,1 followed by the 620 inscribed tablets found in Nestor's Palace at Pylos in the early spring,2 came the sensational discoveries made by the French School at Delphi the following month, which were succeeded again by the Swedish Expedition's opening of an undisturbed Royal Chamber Tomb at Dendra and the clearing of another rich Mycenaean tomb,3 this time in Athens itself, by the excavators of the Athenian Agora. This latter proved to be a chamber tomb of the fourteenth century, cut in the rock of the Areopagus, with much of its contents intact because of an early collapse of the roof. Later in the summer a renewal of the excavations at Mycenae by the British School after many years, brought to light much new information about the Treasury of Atreus and also produced some very fine carved ivories.

The cleaning of the gold and ivory objects found at Delphi is being carried out in Athens,4 and as a result more detailed descriptions may now be given of the finds. Among them were the remains of three life-sized chryselephantine statues and five smaller ones. The heads, hands and feet were of ivory and although damaged by fire and its long burial in the earth, the ivory is well enough preserved to show the fine workmanship and to enable the excavators to assign one of the bigger heads to the Ionian School of sculpture of the first half of the sixth century. The ornaments of the statues were of pure gold and thus are perfectly preserved. There are long locks of wavy hair, diadems, earrings, girdles and rosettes, and two plaques, 35 cm. high, which were fastened to the front of the dress to represent the embroidered panels. These are divided into eight reliefs with Eastern motifs, such as griffins, sphinxes, lions, deer, wild goats, gorgons and Pegasus. Like the ivory heads, they are of Ionian style, and of the same period. In addition to these, there is an abundant collection of little ivory figurines, decorations for a small coffer or, perhaps, the arms of a throne. The figures apparently belong to battle scenes. Among these works of the archaic period were bronzes dating from 480 to 450, notably a perfume-burner supported by a statuette of a woman wearing a peplos, one of the finest examples of classical sculpture before Phidias. This is the first instance of the finding of chryselephantine statues and its importance cannot be overestimated.

At Dendra during May and June the Swedish Expedition cleared five chamber tombs. The first of these to be opened had been plundered in antiquity, but its central cist was untouched and from it was recovered a fine collection of bronzes. In the second tomb a skeleton was found in its original position in the centre of the chamber, with remains of its wooden coffin, or bier, around it. At the foot was a bronze helmet, the first Mycenaean one so far recovered; beside the dead man- was a fine gold-mounted dagger and a sealstone and Palace Style jars stood nearby. The third tomb had been completely plundered, but in the fifth some beautiful pottery was found. The fourth tomb, however, proved to be the largest chamber tomb of its period thus far excavated, and because of the early collapse of the roof it had remained unplundered. It lies very near the Royal Tomb excavated in 1926 and Professor Persson calls this the Queen's Tomb, as no weapons were found in it and a great abundance of gold jewellery was recovered. In two small pits near the rear wall there were quantities of ashes and charred matter. The smaller one contained a beautiful gold cup, with a band of interlocking heart-shaped leaves, executed in repoussé around the circumference. The rim of the cup is scalloped and decorated with beading, as is the curved loop handle. Other finds included a gold signet ring with a sacrificial scene showing an altar and two female figures; eight large gold rosettes, 23% in. in diameter, which evidently decorated a leather belt; two large circular pendants with a central disc swung on a gold

¹ See AJA. xliii, pp. 336-340.

² See ibid., p. 340; pp. 557 ff.

³ Ibid., pp. 577 ff.

⁴This work was begun by Gilliéron, but was still unfinished at the time of his sudden death late in the summer.

wire; more than two hundred gold necklace ornaments; more than a thousand beads of glass paste and one hundred of amber. There were also objects of ivory which have not yet been cleaned and two fine sealstones. The second pit appeared to be wholly reserved for burial gifts and contained five silver vases, two of which showed gold inlay on the rim, a third contained a silver spoon, another a small silver box, while the fifth was a crater in shape and measured 10½ in. in diameter. There was also a shallow ivory bowl lined with gold leaf. The pottery found in this tomb appears to make it earlier in time than the King's Tomb found in 1926, perhaps 1400 a.c. in date.

"The excavations at Mycenae in 1939 were directed principally to four points, the ruins of the Greek temple on the summit and a large Mycenaean house on the east side of the Acropolis, an area outside the Lion Gate, and the Treasury of Atreus.

"The foundations of the Greek temple were cleared, surveyed, and studied in detail. As they survive today they are certainly of the Hellenistic period and it is clear that neither the Hellenistic sanctuary nor any earlier temple that preceded it had a peristyle. Blocks from earlier structures had been built into the foundations and all round a great variety of tiles from early archaic to Hellenistic times was found. Pottery found below the surface of the northern terrace of the temple area shows that a sanctuary had existed throughout "Geometric" times and the tiles and architectural fragments indicate that it was succeeded by an early archaic shrine. The temple, with the massive substructures which supported it on the north, lies south and north and it is possible that it owes this abnormal orientation to the fact that it overlies the shrine of the Mycenaean palace which faced south. It now seems that the early archaic sculpture in relief previously found did not belong to a temple, but since it was all found in the southern part of the temple area, may have belonged to some structure, perhaps an altar, which stood before the south front of the sanctuary.

"At the foot of the north terrace, which is over three metres high, a ledge on the brink of the steep rock was cleared. Here on the very edge is part of a thick wall which, since it is connected with a deep M.H. deposit, is probably the remains of the earlier fortification wall of the acropolis which preceded the L.H. cyclopean walls. Above the M.H. stratum were the ruins of two Mycenaean rooms and in these was found a rich series of objects, which included fragments of stucco altars and terracotta figurines and may have come from the Mycenaean shrine above. Foremost is a unique group carved in ivory completely in the round, representing two sitting women with a child standing before them at its mother's knee (fig. 1). This group is the best Mycenaean ivory yet found and in style, in preservation, and in artistic and archaeological value has no rival. Other notable pieces are the head of a statuette in painted plaster, several gold ornaments, a cylinder seal, perhaps Hurrian, and many beads in glass and faïence, including a lantern bead.

"The House of Columns on a broad terrace on the east side of the citadel, which was excavated by Tsountas in 1895 but never published, was re-cleared and planned. The centre is occupied by a colonnaded court with a cement pavement. In the northern part is a megaron, opening on the court by a porch with two large column-bases. The southern part was built above an extensive basement approached by a descending ramp. In one basement room was a series of pithoi, large and small, and in another the fragments of many large stirrup jars, two of which are inscribed. The house is remarkably well built, with massive walls and thresholds of conglomerate and is architecturally most interesting as being the only large Mycenaean house not a palace yet found. It is probably contemporary with the large megaron and court at Tiryns and was apparently inhabited right up to the burning of Mycenae in the twelfth century.

"To the west of the Lion Gate, outside the cyclopean walls and just north of the Grave Circle, the Granary, and adjoining buildings within the walls, an area which Tsountas had partly cleared was completely excavated. Here in a comparatively small space were found fifteen graves ranging in date from M.H. to L.H.II. They lie in groups of five, four, or three, and several were graves of children. Some are cist graves of the usual M.H. type, others shallow rock-cut pits, and there is one definite shaft grave smaller than the Royal Graves found by Schliemann but of the same form. In this were seven unbroken vases of late L.H.I style and five gold buttons. The discovery of these graves so near the Royal Shaft Graves and the shaft grave below the Granary shows that the prehistoric cemetery of Mycenae of M.H. and L.H.I-II times was cut



FIG. 1.—MYCENAE. GROUP IN IVORY Courtesy of Mr. Wace

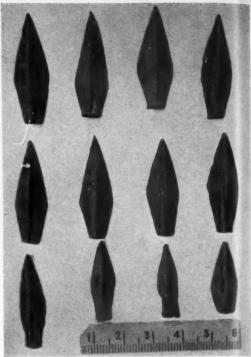


Fig. 3.—Bronze Arrowheads Presumably Persian



Fig. 2.—A Section of the Phocian Wall, with a Walled Gate



Fig.4. — The Hill Identified as "Kolonos." Later Fortifications on Summit

through by the cyclopean wall when the Lion Gate and adjoining walls were erected early in L.H.III. Further excavation in this region should make still clearer the connection between this part of the cemetery and that within the walls, the Grave Circle and the graves beneath the Granary and the houses (Ramp, Warrior Vase, and South Houses). This is of essential importance for the history of the Lion Gate and Grave Circle and Royal Shaft Graves themselves.

"At the Treasury of Atreus the construction of the dromos walls was analysed in detail. They are constructed with an ashlar facing of large conglomerate blocks, well bonded with a backing of undressed limestone set with yellow clay and finally a solid support of crude brick of yellow clay which would render the backs of the wails water-tight. The walls are built directly against the rock and so the dromos can never have been any wider. At a point ten metres from the façade of the tomb on both the north and south sides of the dromos, in a hollow in the rock making a kind of large bothros, an enormous deposit of broken pottery, stucco fragments, terracotta figurines, animal bones, shells, and other domestic refuse was found. The character of the pottery, much of which consists of cooking and similar domestic vessels and of the animal bones (mostly domestic animals) which are split for the extraction of the marrow, indicates that this deposit is probably a dump of refuse thrown down the hill from houses above. Trial trenches in search of its origin revealed on the top of the ridge above the tomb the foundations of Mycenaean houses, apparently large and well equipped and showed that an important residential quarter had once crowned the hill above the tomb. The bothros deposit was obviously cut through by the builders when they dug into the hillside to construct the tomb, and consequently runs under the north and south walls of the dromos. It thus without doubt antedates the tomb and since the bulk of the pottery in the bothros is late L.H.II or early L.H.III, the Treasury of Atreus cannot be earlier than 1350 B.C. Above this bothros deposit runs a layer of chipped and powdered rock which, since it also contains chips of conglomerate, is obviously the material hewn out by the builders of the tomb when they excavated the hillside for the dromos and the dome. This layer of powdered rock surrounds the foot of the dome and stops against a retaining wall, which runs obliquely up the hill from the back of the dromos walls both

north and south from a point about ten metres from the façade. This retaining wall was apparently designed to hold up the mass of earth over the top of the dome, to protect it and to weight it. At the foot of the retaining wall lay about fifty blocks of poros, tumbled down in disorder, as if the builders of the tomb had cleared them away and thrown them over the edge of the wall to get them out of the way as useless material. The poros blocks from their shapes and size seem to have belonged to some monumental building, perhaps the wall of a large court or terrace, which was removed to make room for the Treasury. This material, poros, was popular at Mycenae in the fifteenth century and its use preceded that of the hard conglomerate of which the tomb is built. A poros building would thus have been the natural predecessor of the conglomerate Treasury of Atreus built in the fourteenth century. Two poros blocks found at the foot of the wall which supports the terrace in front of the entrance to the dromos bear mason's marks in a form of the Minoan script, the first time that such marks have been found on the Mainland.

"The main results of this year's work, the determination of the date of the temple foundations, the study of the architecture of the House of Columns, the tracing of the prehistoric cemetery outside the Lion Gate, and the knowledge gained of the construction and date of the Treasury of Atreus are all factors of the first importance for the history and culture of Mycenae. Further work, however, remains to be done on all four points and there are other areas at Mycenae which urgently demand investigation." 1

At Thermopylae large-scale excavations were undertaken by the Director of Antiquities of Greece, Mr. Marinatos, with funds provided by an American donor. The chief aim of these explorations was to clear up many topographical problems connected with the battle of 480 B.C. On the east side of the Pass, Mt. Kallidromos ends in a relatively low spur, about 45 m. above the plain, which runs east and west. On this hill various explorations had placed, from time to time and at different places, the Wall of the Phocians, mentioned by Herodotus as that which the Greek forces under Leonidas had repaired and used as the base of their operations. Mr. Marinatos cleared the whole of this wall, which runs from east to west following the contour of the hill. It is preserved in a fairly good state and is

¹ For this report I am indebted to Mr. Wace.

built in a zigzag line with a square tower at its western end, which is separated from the wall by a narrow passage in the form of a small gate (fig. 2). The remains of this tower were always visible and had been excavated over and over again, since the tower was long considered to be the Polyandrion of the Three Hundred. It is very probable that the wall terminated in a similar tower at its eastern end; but this section is now badly destroyed. Herodotus asserts that in an earlier period the wall had several gates, two of which have been brought to light by this year's excavations, one of them being contemporary with the wall as it now stands. The original fortification wall was constructed of large, hard stones in a somewhat archaic style, which in some places resembles the "Cyclopean." Later, repairs were undertaken and for this purpose use was made of a soft stone of salt-formation, produced by the action of the Hot Springs. Perhaps the three ascending stairways behind the wall on the north may belong to this period of reconstruction.

The description of Herodotus leaves no doubt that the "Kolonos," the hill on which the Greeks took refuge and where they fell fighting to the last man after the death of Leonidas, was not the same hill on which was built the Phocian Wall. Mr. Marinatos, therefore, investigated another neighboring hill usually marked No. 2 on the older plans. This had previously been excavated and was thought to contain only Byzantine tombs and not to be worth further investigation. The new excavations, however, showed that the summit of the hill had been built over many times from ancient days down to modern times, but from the slopes of the hill great numbers of bronze and iron arrowheads were recovered, proving that this had been the site of a great battle. The arrowheads are of various types (fig. 3) but practically all belong to the fifth century, as may be proved by comparing them with those found at Marathon, from the Acropolis of Athens and from many wells excavated in the Agora at Athens containing fifth-century deposits. There seems then no doubt that these Thermopylae arrowheads came from the battle of 480 B.C. The quantity of these arrowheads shows that Herodotus' description of the cloud of arrows which the Persians loosed against the Greeks was not exaggerated. Only one iron javelin or spearhead was found, probably Persian.

Fortifications occupied the eastern height of "Kolonos" and extend to the flanks of the hill in all directions. The eastern fortification is made of dressed poros blocks, the rest of irregular hard stones. It is obvious that these forts do not constitute a single unified system but were built from time to time and are undoubtedly Hellenistic in date (fig. 4). From the same period come quantities of pottery and masses of coins. It appears that the Kolonos hill was used in that time also as a harbor, since the inner part of the Malian Gulf towards the west had become silted up. In the Roman and Byzantine periods the Kolonos was used for dwelling houses, as is shown by the remains of buildings, abundant tiles and numerous tombs. This development, according to Mr. Marinatos, explains the disappearance of the memorial monument set up to Leonidas and his heroes. Herodotus reports that they were buried where they fell, but after him no one mentions having seen the lion or the inscription set up over the dead. No remains of their bones, even, were found, but there is a little hope that when the lower slopes of the hill are investigated, some traces of the heroes may be found. Unfortunately, however, not only is this area covered by a thick layer of stony formation deposited by the Hot Springs, but water is encountered at a very high level, making it almost impossible to reach the strata of the fifth century.1

Marinatos.

ELIZABETH PIERCE BLEGEN

¹ For this report I am indebted to Mr.

BOOK REVIEWS

HANDBUCH DER ARCHAEOLOGIE IM RAHMEN DES HANDBUCHS DER ALTERTUMSWISSENSCHAFT, herausgegeben von Walter Otto. Zweite Lieferung. Pp. xvi + 239-642; pls. 37-112. Munich, C. H. Becksche Verlagsbuchhandlung, 1938. RM. 20.25.

This volume begins with the conclusion of the introductory section concerning the "Quellen," with contributions by Erich Pernice on "die literarischen Zeugnisse" (pp. 239-328) and by Helmut Arntz on "Schrift und Schriftzeugnisse Nordeuropas" (pp. 329-356, with pls. 38-42). These articles are followed by a treatise on "das Problem der Form in der Kunst des Altertums," by Bernhard Schweitzer (pp. 363-399) and a review of "die aeltere Steinzeit" by Oswald Menghin (pp. 402-429, with pls. 43-48), dealing with the European art of the "Miolithicum" or the latter half of the last glacial period and the earlier part of the postglacial period-a stretch of time which by geologists is generally dated from about 20,000 to 5,000 B.C.

The second half of the volume (pp. 432-642), the only one which I am able to judge as a specialist, comes down to less astronomical figures. It deals exclusively with the art of ancient Egypt, from its beginnings in the fifth millennium B.C. down to its latest works in the years of the Roman Empire, and is written by Alexander Scharff, the well known Egyptologist of the University of Munich. Scharff has divided the huge mass of material into five sections: 1. The beginnings of Egyptian art, down to the end of the second dynasty (pp. 434-464). 2. The pyramid time of the Old Kingdom and the first intermediate period (pp. 405-524). 3. The Middle Kingdom and the second intermediate period (pp. 525-550). 4. The New Kingdom and the transition toward the "late times," down to 712 B.C. (pp. 551-611). 5. The late times ("die Spaetzeit"), from 712 B.c. to 395 A.D. (pp. 612-642).

Within the individual sections the author introduces subdivisions treating the architecture, the sculpture, the drawing (including reliefs and paintings) and the applied arts ("Kunstgewerbe") of the different periods. In the chapter dealing with the art of the Old Kingdom, a lengthy theoretical passage, based largely on Heinrich

Schaefer's thoroughgoing investigations, precedes the sections treating the drawing and sculpture of this period (pp. 491–497).

The quicker rhythm of the New Kingdom apparently made a further division of the fourth section necessary. Scharff decided on five subsections: A. The beginnings and the first climax, down to Amenophis II. B. The time of maturity, from Thutmosis IV to Amenophis III. C. The Amarna period. D. The time of restoration and the second climax, comprising the nineteenth and twentieth dynasties. E. The time of decay during the twenty-first to twenty-fourth dynasties. (This last part forms only a brief appendix to the section dealing with the New Kingdom. It is followed by a summary treatment of the applied arts during the whole period of the New Kingdom which, rather inconsistently, is designated as subsection F.)

Within his fifth main section, Scharff treats not only the Egyptian "Spaetzeit" proper, which he subdivides into the "Ethiopian" period (dyn. 25), the "Saitic age" (dyn. 26) and the time of the Persian conquest (dyn. 27–30), but also the "Graeco-Roman age." This latter he reckors from 332 B.c. to 395 A.D. He discusses first the Egyptian temples and their reliefs, second the "Meroitic" monuments in upper Nubia, and thirdly the monuments of Graeco-Roman art in Egypt. A fourth subsection deals with the sculpture of this period, Egyptian as well as Graeco-Roman. The last two subsections treat the Egyptian monuments in Italy and Egyptian elements in Coptic art.

The text contains a map of Egypt and about thirty ground plans of architectural features. There are sixty-four plates with two hundred fifty-four photographs, amply illustrating the different phases and varied subject matter of Egyptian art.

The merit of this excellently written and absolutely reliable treatise inheres not so much in new conceptions of Egyptian art or in any new approach thereto, but rather in the masterly outline of the history of the various branches of this art during the several periods of Egypt's general history. The author writes not as a specialist in art history, but as a trained historian and archaeologist. He commands a vast knowledge

of the Egyptian monuments as well as of the widely dispersed general and special literature concerning these monuments. His book is a mine of information for everyone who wants to make a thorough study of Egyptian art; the copious notes should enable the reader at every step to check the author and to form an opinion of his own.

As to the general understanding of Egyptian art I am in perfect accord with Dr. Scharff. He pictures convincingly the attitude of the Egyptian artist toward nature and his strivings to render reality, far from any kind of conscious abstraction (p. 493).

The author's statements regarding our attitude toward Egyptian art are excellent and should be remembered by all who sincerely try to understand and to enjoy it: "Egyptian art, in its severe aloofness, cannot be conquered at first sight ('im Sturm') and will never yield to him who woos it with modern sentimentality. It is only after having acquired a knowledge of its spiritual essence that we may enter, full of reverence, the colorful world of the reliefs and sculptures of the Old Kingdom and ask the monuments for what they may reveal to us."

It goes without saying that in the immense field of Egyptian art no two specialists need necessarily agree upon all the details. I should like to state my differences of opinion in a few major points. On pp. 498 ff. Scharff states that "all Egyptian art is mostly religious, a characteristic of all genuine art which, in our own time, unfortunately, has been more and more neglected." I would distinguish here between "religious art" and the art of a religious people. There is no doubt that the men who created the reliefs and sculptures of the Old Kingdom were devoted to their gods and worshipped them in sincerity. But if religious art" has any meaning at all, it can only be that it is an art used in the service of religion, i.e., in the cult of the gods. This, however, is true only of one part of Egyptian art and, as is well known, not the largest part, especially during the earlier periods. Under the Old and Middle Kingdoms, the majority of the works of art was made not for the temples of the gods or for the monuments of the god-kings,1 but for the tombs of the nobles. This art, in my mind, is of an en-

'Incidentally, it may be said that even if we should speak of the royal tomb monuments as "temples" the misleading word "valley temple" instead of "portal building" ought to be avoided.

tirely profane nature. The deceased were never thought of as gods, and their tombs were houses, i.e., dwelling places for eternity, not temples. These tombs, with their statues and reliefs, corresponded to and originated from certain funerary customs, which were based on a belief in the continuation of life within a perfectly worldly hereafter, and it seems to me misleading to designate these works as "religious art." In his excellent description of the statue of "Hemiun" in Hildesheim (p. 516), Scharff seems to contradict himself in stressing its absolutely worldly appearance, in which no "goettlicher Hauch" is discernible.

On the other hand a wrong impression is conveyed when Scharff maintains (p. 498) that the artists of the Old Kingdom created their works only (!) for the reputation of the owner of the tomb during his life and for his fame after death. This motive would seem a very irreligious one indeed for works of art and thus to contradict Scharff's own words, but it certainly is due to an erroneous interpretation. The social position of the owner of the tomb no doubt was expressed at first in the size of the tomb and later in the wealth of its reliefs and the beauty of its statues. But the main motive has always been to supply the nobles with all their needs after death and to make their second life as agreeable and as similar to the first one as possible.

But enough of dissenting remarks. As a whole, Scharff's treatise is an unusually valuable addition to the existing literature on Egyptian art. We are deeply indebted to him for his painstaking and often illuminating work, and it is to be hoped that it may soon be followed by a second edition, separated from the large series in which now it is more or less hidden, and thus made more easily accessible to a larger public.³

HERMANN RANKE

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LES PEUPLES DE L'ORIENT MÉDITERRANÉEN ("CLIO"; INTRODUCTION AUX ÉTUDES HISTORIQUES 1). I—Le Proche-Orient Asiatique,

² The expression "cult of the dead" ought to be avoided, at least for the earlier periods, and it seems grotesque to speak of an elaborately developed cult of the dead even in the earlier times of Egyptian history (p. 437).

³ A number of additions to Scharff's text are found on pp. 863-868 of the same volume of the

Handbuch.

by Louis Delaporte. Pp. xxxv + 361. Paris, Presses universaires de France, 1938.

This is the first of a proposed series of companion volumes for the use of students of general history. The intent of the series is to place in the hands of the non-initiate authoritative information with regard to the present status of the subject in question, accompanied by representative up-to-date bibliographies. It will be seen readily that the Editors have set themselves an ambitious and difficult task. The prospective user of the series must not be bewildered at the outset by intricate details; he is to be advised as to where the most competent authorities can be found after the necessary preliminaries have been mastered; in short, he is to be provided with the safest possible short cut to the core of given historical periods. When the period happens to cover the history of the Near East from the beginning of civilization to the end of the Persian Empire. as it does in the volume before us, the task becomes enormous. Unqualified success is scarcely to be expected.

M. Delaporte is intimately acquainted with a number of archaeological and linguistic topics pertaining to the Ancient Near East. He is also an expert bibliographer. If the subject of the present volume had to be covered by a single scholar, the author was clearly a good choice. One may question, however, whether a subject of such unusual range should be entrusted to a single authority, no matter how encyclopaedic his attainments may be. Uniformly balanced and judicious coverage is not to be expected in such circumstances. It has not been achieved in the present instance.

A few examples may suffice to indicate some of the inevitable shortcomings of this ambitious undertaking. In dividing his subject into individual regions the author lists among other sections one on "Assyria and Subartu" (p. xxv) and another on "Hurri and Asia Minor" (p. xxvi). The trouble with these two divisions is that they are not mutually exclusive throughout. The inconsistency may not bother the expert but it will confuse the novice for whom the work is intended primarily. Chapter II of the Introduction presents a convenient chronological Table which takes up 17 pages. But the attempt to cover in tabular form such fresh accessions as Near Eastern prehistory shows signs of strain at the very beginning. Thus Tepe Hissar is listed as a site of the pre-Obeid period while the important sequences of Judeideh are not included at all. The statement that there are serious differences between the Hurrian of Asia Minor and that of Ugarit (p. 192) is likely to be more confusing than instructive. The bibliographical references which are appended to each chapter are useful but not always well balanced. This may be said of the book as a whole. It is useful in many respects and will be found helpful by many. But it cannot be recommended without reservations for the use of those who are not equipped to question the author's judgment.

E. A. SPEISER

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LA NEUVIÈME CAMPAGNE DE FOUILLES À RAS SHAMRA-UGARIT, by Claude F.-A. Schaeffer. (Extrait de la Revue Syria, 1938). Pp. 193–225, 313–334, 183–185, 127–141, 335–344, 15 pls. and numerous figs. Paris, Librairie Orientaliste Paul Geuthner, 1938. 125 Frs.

With his familiar and commendable promptness, M. Schaeffer supplies us with a full preliminary report on the ninth campaign at Ras Shamra. A promising new sondage on the tumulus on the summit of Jebal Aqra (Mons Casius) is also described. In separate chapters, MM. Dhorme, Dussaud, and Virolleaud treat the new cuneiform texts, which this reviewer must leave for the comment of professional philologists.

It is extremely fortunate for the course of comparative archaeology in Syria, that, at a time when some confusion has been introduced by enthusiasm for too early dating at one of the more northern sites, M. Schaeffer has produced a magnificent series of Middle Bronze Age objects and pottery from Ras Shamra tombs. This material, from tombs under houses on the north terrace, was contemporary with a good part of level II and extended into level I. The five tombs, rectangular stone chambers with slab roofs, inclined walls on the long sides, and short dromoi, were used by each generation during the period of occupancy of the houses. Hence they are not quite that archaeologists' delight, the sealed tomb with definitely contemporary offerings, but as a stratigraphic series within a delimited and protected area, are still of exceptional importance. Beginning with the imported Kamares sherd (for which M. Schaeffer suspects a lag), the earliest ceramic series includes Tell Yehudieh jugs, Cypriote red-on-black ware, globular painted bottle jars of well known Palestinian type, redslipped jugs of the Byblos Tomb II type, and the more truly Syrian wares. Many of the simpler examples of this last group have analogies with the pottery of the hinterland. The occurrence of the fine pinched-spout pitchers with painted bands and waves (i.e., fig. 26, Z) should especially be noted in the Ras Shamra assemblage—these are the essential type of Qatna Tomb I, and one has suspected the sixteenth-century date given there as a bit too low. It is, in fact, the association of wares more usual on the inland sites with the better known types listed above, and with "Hyksos" scarabs, which gives such importance to this Ras Shamra discovery, and which will prevent any misconceptions in the ceramic chronology of Middle Bronze Age Syria.

With this eighteenth-century beginning, the tomb material runs on to the fifteenth- and in two cases, to the fourteenth-century types. Evidence for a cessation of commerce with Crete is seen in the local imitations of Minoan forms, which replace imported pieces after the "Hyksos" occupation is established. Then the "Hyksos" types go out of use, and along with the simpler wares on which the inland excavators are more dependent, the spindle bottle, the base-ring ware, and finally the Cypriote milk bowl and the Mycenaean stirrup vase make their appearance. Throughout the series appear more datable scarabs and an especially useful group of bronzes. Making legitimate use of a scarab of Amenhotep III from the upper deposits of one tomb, M. Schaeffer is able to give an approximate terminus ad quem for the first phase of level I, a phase which evidently ended in a fire (mentioned in an Amarna letter) and was followed by rebuilding.

One or two problems present themselves. It would seem that perhaps too little is yet known of the earlier phase of level II pottery to cause M. Schaeffer such concern at finding the painted pinched-spout pitchers (fig. 6, E) with the Kamares "egg-shell" sherd. Such forms may easily have had an earlier appearance at Ras Shamra than the excavator supposes. Then, when M. Schaeffer brings up the possible structural ancestry of the Ras Shamra tomb form in the Til Barsib hypogeum-a seemingly reasonable possibility-we are faced anew with awkward problems of the date, duration, and associations of the Til Barsib structure. Present in the hypogeum is the "caliciform" series, and its apparent absence at Ras Shamra must also be explained. From the plain of Antioch to Palestine, and at two coastal sites immediately south of Ras

Shamra (Tell Sukas and Tell Simiriyan), the "caliciform" series makes its appearance. Especially then, if the great tomb at Til Barsib is the structural ancestor of the Ras Shamra tombs, might one not expect to find its associated pottery at Ras Shamra as well? If the chalice series is, in fact, lacking at Ras Shamra, it would seem that we must account for a gap between levels II and III. This would also affect the dates for the red-black burnished ("Khirbet Kerak") wares discovered in earlier seasons, which M. Schaeffer has tentatively placed at the period of transition from levels II to III.

With apologies for a slight excursion, we might outline the facts as they appear at present elsewhere. At Tell Judaidah, the "Khirbet Kerak" type wares of Jud. XI are separated from the 'caliciform" wares of Jud. IX by some three or four floors, which contain the "smeared-wash" pottery of Jud. X. Now Palestinian archaeologists have insisted on a quite late date for the "Khirbet Kerak" wares there, evidently with sufficient foundation. (Wright summarizes the Palestinian position in his Pottery of Palestine . . . , a book which, while no doubt useful for Palestine, suffers from some misunderstandings and false inferences with regard to Syria, usually excusable owing to the general tardiness in publication of Syrian sites). Mallowan's dates for the pottery of the Til Barsib hypogeum (Antiquity 1937, pp. 328 ff.) a series in which 713 pots out of 1045 have more or less exact place in the "caliciform" waresare almost exactly those given to the "Khirbet Kerak" wares in Palestine (±2600-2300 B.c.). Now what must be done with the Judaidah evidence? Believing that an end date of 2500 B.C. for Jud. XI and our original dates of 2400-2000 B.C. for Jud. IX can be maintained, we would propose to lower Mallowan's dates for Til Barsib by a hundred or more years, and insist that the Palestinian school reckon with earlier dates for the "Khirbet Kerak" wares in the north. The pertinence of all this to Ras Shamra would be that M. Schaeffer may have to admit the gap between levels II and III, unless he has the good fortune to discover "caliciform" pottery at Ras Shamra. This would be a much appreciated step toward the solution of a somewhat tiresome problem.

One other question remains in the mind of the reviewer. In new operations on the northwest quarter of the mound, large scale architecture of level I appeared. Concerning one building which he calls a "residence," M. Schaeffer claims to have searched vainly for any closer analogies than that of the Early Bronze Age "palace" at Ai. Not that the plan offers a much more exact parallel, but owing to the recognized Hurrian influences at Ras Shamra (including "Hurrian" metal types in the complex in question) we would suggest that M. Schaeffer consider an early north Mesopotamian plan. This is first seen in its essential simplicity in the Ishtar temple of the E-Schicht at Ashur, and Wachtsmuth (JdI. 1931, pp. 32 ff.) considers it close to the "Mitannischer Urbautypus." Where the Ras Shamra "residence" acquired its central piers is hard to say, but this one point in common with the Ai "palace" is of no great value, as M. Schaeffer himself realizes. On the other hand, while the Ras Shamra "residence" has several interesting points in common with the north Mesopotamian plan, it seems to lack the characteristic bent axis of that building.

The exceptional importance of this ninth Ras Shamra campaign is that it gives us such firm ground on which to check the archaeology of the inland sites in north and central Syria—one more assemblage of archaeological fact from a truly remarkable site.

ROBERT J. BRAIDWOOD

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UN GRAND PORT DISPARU, TYR, par A. Poidebard.
Tome XXIX, Bibliothèque Archéologique et
Historique du Service des Antiquités, Beyrouth. Pp. x + 78, with separate atlas of 29
plates. Paris, Librairie Orientaliste Paul
Geuthner, 1939. 250 Frs.

Père Poidebard, the famous "flying priest" of the Roman limes in Syria, here presents a handsome investigation on the largely submerged constructions of the port of Tyre. With evidently very enthusiastic coöperation from the French naval and air authorities, the author made use of divers, hydrographic surveyors, and aerial photography, and has produced plans of the entire port area as well as excellent photographs. The conclusion contains petrographic analyses and other contributions by various experts.

Actually, the volume presents little new material for the archaeologist. The survey of the great bow-shaped sea-wall to the south, and the break-waters which protect it, is, of course, the first such accurate attempt made at Tyre (and in all Palestine and Syria for that matter). Some stone sizes and sections are presented, which will be of use in the future, expecially if the construction at Tyre can ever be dated. But Père Poidebard is

able to contribute no information as to the origin of the remains, or the cause of their submergence. At present the volume amounts to slightly more than an interesting exercise in method, but its value will become more apparent when investigations on other harbors and ports are undertaken.

ROBERT J. BRAIDWOOD

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EARLY IVORIES FROM SAMARIA, SAMARIA-SEBASTE.
Reports of the Work of the Joint Expedition in 1931–1933 and of the British Expedition in 1935, No. 2, by J. D. Crowfoot and Grace M. Crowfoot, with a note by E. L. Sukenik. Pp. xv+62; figs. 16, frontispiece in color, pls. 25. London, Palestine Exploration Fund, 1938.

This publication makes a valuable addition to our knowledge of Oriental ivories. The Samaria ivories were found scattered throughout the area of the Palace of the Israelite period, although not unfortunately in any stratum which could be dated precisely. They consist of hundreds of small and for the most part fragmentary pieces of wall decoration and furniture. In spite of the number of fragments, however, the variety of motives represented is not great. The description of the motives, the tracing of their origins and the references to parallels are excellently done. The chief subjects represented are: the child Horus, Isis and Nephthys, winged human figures, sphinxes, animals in combat, lions, bulls and other animals, human figures, lotus, palms and other ornaments. Although the authors are right in emphasizing the great influence of Egyptian motives and Egyptian style on these ivories, they seem to the reviewer to have gone a little too far in some cases. For instance, the lions (pl. ix) have the open mouth and shoulder mane found in Hittite, not Egyptian, art; the stepped frame of the window on the plaque "the woman at the window" (pl. XIII) is a feature of Asianic architecture in wood; it occurs in Persia, Lycia and Ionia (RM. xxxviii-xxxvix, 1923-24, p. 68), and its origin is proved by the early architecture of Uruk (Christian, Altertumskunde des Zweistromlandes, p. 118). The palm may very well have been known to the Semites from early times (Barton, Semitic and Hamitic Origins, p. 115 f.) and was so often represented by them (cf. May, Material Remains of the Megiddo Cult, pp. 36 ff.) that it seems unlikely it was borrowed from Egypt. The techniques used (and of these the Samaria ivories are valuable examples) are Egyptian: inlaying with lapis lazuli, glass or paste, plating with gold leaf, or staining.

With the exception of a few later figures (pl. IX) the ivories are all contemporaneous, although made by several craftsmen. One may perhaps go a little farther than the authors and distinguish a number of styles: the fragments on pl. I differ considerably from the fragment on pl. II, 2; the wings on pls. V, VI, VII all show different patterns; the drapery on pl. II differs from those on pls. I and V, and so forth.

The authors are inclined to assume that some at least of the pieces were made on the spot; as a matter of fact, a large unworked piece has been found, as well as an unfinished one, but since the latter is very awkwardly executed, the reviewer would prefer to suggest that the better pieces were made elsewhere. In any case, as the authors point out, these new ivories are closely related to those from Arslan-tash and Nimrud. This relationship gives a clue to their date, although the slight differences in style and motives must be taken into consideration. The provenance of the ivories might provide another clue, as it is tempting to see in them the decoration of King Ahab's (875-851) ivory house, mentioned in the Bible. A third clue is offered by letters on certain of the ivories, which are dated in the ninth century by Sukenik in a special chapter. Although a date in the ninth century is most likely, the reviewer still is reluctantly inclined to give up the connection with Ahab and to assume a date in the latter part of the century: the relationship of the Samaria ivories with those from the Northwest Palace in Nimrud seems especially close, and these last probably date from the eighth century (Barnett, Iraq ii, p. 185). VALENTIN MÜLLER BRYN MAWR COLLEGE

Argolis, Band I, Landeskunde der Ebene von Argos und ihrer Randgebiete, by Herbert Lehmann, with an Introduction by Walther Wrede. Pp. xvi+150, pls. 8 and map, figs. in text 28. Athens, Deutsches Archäologisches Institut, 1937. RM. 15.

This first part of a thorough study of Argolis by the German Institute deals appropriately with the physical geography of the area. The importance of a knowledge of the details of the physical geography of any section to those who would understand its cultural history is stressed by Wrede in his Introduction. Although geographies of Greece as a whole and of parts as large

as the Peloponnese have appeared before, there are very few detailed studies of areas which form geographical units. The present volume provides an admirable account of one of the most individual of these units in Greece.

A general description of the physical geography in which boundaries are carefully define (and color, one notes gratefully, is appreciatively described) is followed by a geological history of the whole region in detail, including both the rock structure of the enclosing hills and the occasional outcrops in the plain and soil analysis of the plain. The section on climate deals with atmospheric pressure and winds, temperature, rainfall, humidity, clouds, and water-supply. After a description of vegetation, the author proceeds to a discussion of habitation from prehistoric times to the present day and describes the location and geographical character of each of the sites. The continuity of habitation on several of the most important early settlements, the foundation of new centers of habitation as the political and economic picture changes, and the growth in population in the last century are pointed out. Means of communication and their control over the life of the area are described. Detailed analysis of the cultivation and agriculture, crops and flocks, gives the economic geography of the region. The book concludes with a summary of the historical geography of the area, showing the strong influence of the physical geography on the historical and emphasizing the great individuality of the character of Argolis both as a physical and a historical geographical unit.

There is a fairly extensive bibliography. Statistical tables, incorporating the material in the official Greek records for the period 1894–1930 (and in some cases 1934), contribute largely to the usefulness of the sections on climate and cultivation. Charts, graphs and plans are used throughout. A good map, 1:50,000, is based on older ones, but corrected and supplemented by the investigations of the author. Photographs are few but chosen to illustrate specific geological and geographical points. The repetition in the text of several of the plates, especially as the printing is less clear, is of dubious advantage.

The volume will form not only a splendid foundation for the proposed future studies in the culture of Argolis, but also an estimable model for further monographs on the physical geography of limited sections of Greece.

Lucy T. Shoe Mount Holyoke College

EXCAVATIONS AT OLYNTHUS, Part VIII, THE HELLENIC HOUSE, a Study of the Houses found at Olynthus with a detailed account of those excavated in 1931 and 1934, by David M. Robinson and J. Walter Graham. Pp. xxi+370, pls. 110, figs. in text, 36. Baltimore, The Johns Hopkins Press, 1938. \$15.00.

This second volume of the Olynthus series dealing with architecture is far more than a mere excavation report on a single site. In spite of the fact that already further excavation at Olynthus (in 1938) has changed some points of interpretation and added further new information, the study of the Hellenic house as set forth here will remain for some time the reference work on domestic architecture of the late fifth and early fourth centuries B.C. It would be hard to overestimate the importance of this contribution to our knowledge of Greek architecture and civilization, filling as it does one of the most tantalizing gaps in our previous information.

After a brief summary of the history of Olynthus after 348 B.C. (in the Preface) the authors begin Part I with a further defense of 348 as the terminus post quem non of the city (continually confirmed by further evidence from the site and now quite generally accepted) and so of course as the lower date for the houses. The upper limit for houses on the North Hill can be set at 432 B.C., when Olynthus gained dominance over the Chalcidian cities after the revolt from the Athenian League. Dating of individual houses to definite decades is impossible; even relative chronology is difficult, though presumably building began at the south end of the hill (nearest the old settlement on the South Hill) and moved northward. Certainly all the houses in a row were contemporary and probably all in the same block.

There follows a general description of the city plan, its streets running east to west and wide avenues north to south, enclosing blocks normally of ten houses, divided in two rows of five by drainage alleys running east to west, and the city wall along the edge of the hill. An attempt is made to estimate the original extent and thereby the population of the city; but the campaign of 1938 has shown that these figures must be increased considerably. Standards of measurement are calculated to show that two standards were in use: the Attic-Eubeic foot of 0.295 m. for the city plan and some of the houses, later replaced by the Attic-Aeginetan foot of 0.328 m. for most of the details of the houses.

Part II gives a detailed description of each house with useful cross reference to Parts III-V which synthesize this material.

Part III defines the Olynthian house type in general and then deals with each room or element in detail. The pastas and pastas-peristyle types in use at Olynthus are paralleled in literature and on other sites and are contrasted with the prostas type of Priene. It is shown that the pastas type is probably the regular Greek house type of the fifth and fourth centuries and that the Delian type is a direct development of it, while the Priene type represents a local variation. The importance and the regular observance of the principles of orientation laid down in literary accounts is demonstrated.

The detailed treatment of each element is made valuable by the thoroughness of literary and bibliographical documentation, which characterizes the volume throughout. The ancient Greek names given regularly are most welcome. A double door, flush with the wall or set in a prothyron (occasionally there are both a single door for people and a double door for carts side by side), leads into the court, usually cobble stoned, always on the south side and well drained, and of course the most prominent and indispensable feature of the house. The pastas, stuccoed as a room, borders it on the north in all the houses; some add from one to three porticoes on the other sides. An important point is the definite evidence for a complete peristyle court (hitherto considered a Hellenistic development) before 400 B.C. Of considerable importance also for the study of domestic architecture is the new evidence for the identification of the pastas with its pillared entrance, the andron with its raised cement platform around the sides of the room, the kitchen with its hearth and flue (but note the slight change in interpretation in AJA. xliv, 1939, pp. 51-53), the bathroom with its terracotta tub set in a cement floor, and the second storey, which probably contained the bedrooms. Shops, usually of one room only, are located along the avenue sides of the houses, especially at the corners.

Part IV on Construction will prove most useful for reference. On the rubble foundation (rarely faced with dressed limestone blocks) rise walls of adobe (the authors prefer this term to "mud brick," etc.). A detailed discussion of the size of the bricks, the strength and advantage of adobe is followed by a list of parts made of wood, most of which seem to have been carried off shortly

after the destruction, to be reused elsewhere because of the great value and scarcity of wood; a discussion of the construction of the roofpitched, covered with Laconian tiles (rarely Corinthian); an account of supports-square pillars in marked contrast to the columns preferred at Delos, regularly of wood with stone bases and capitals, but carrying a wooden entablature. Stone or bronze pivot sockets show that in simple jambless doorways, rarely equipped with thresholds, wooden doors turned, fitted with bronze nails, handles, knockers, keyholes (for both Homeric and Laconian locks) and latchstring grips. Windows were probably more common than is usually thought; the placing of the andron on the outside wall, regardless of orientation, suggests that it was lighted by windows. Stone bases for stairs show the location and give the run of stairways. By assuming the pitch to be the same as that which is normal at Delos, the height of the first storey can be estimated, and is shown to vary from 2.20-3.90 m. All the houses in one row had a common roof apparently and so floors of equal height. Earth is the commonest floor surface for rooms, cobble-stone for court and stable, cement where there is dampness, or for decoration of important rooms when mosaic is not used. The black and white pebble mosaics, with animal, mythological, and ornamental designs, occur only in the main rooms of the wealthiest houses. Painted stucco walls are used only for important rooms, but in nearly all the houses, and yield new evidence for the early styles of Greek wall-painting: the two- and threezone and the incised-line styles.

In Part V on Equipment, it is shown that terracotta pipe-lines were used to bring the principal water supply, as well as to carry off drainage. There are a few private cisterns in the courts of the houses. On the rims of numerous large pithoi found in store-rooms the value of the pithos itself, not its contents, the authors contend, is inscribed: a pithos of 0.86 m. diameter at the rim cost 53 drachmae. Several types of basin pedestals, formerly considered Hellenistic, are shown to have been in common use in the Hellenic period. Foundations for the main altar to Zeus Herkeios are found in the courts and numerous portable altars of terracotta and stone appear in various rooms. In discussing the saddle querns and hopper type millstones, the authors trace the development of five successive types of Greek grain-mills. Descriptions of stone mortars, olive crushers and presses, and wine-treading floors complete Part V. An Appendix lists by publication or inventory numbers the Pottery, Lamps, Coins, and important Metal Objects found in each house.

Beside the usual Table of Contents, List of Illustrations, and General Index (satisfactorily complete), there is an Index of Greek Words and a most welcome Concordance between Plates and Text. The illustrations both in the text and on the plates are of a high quality and generous. For each house, for many structural details, and for most of the objects found in the houses which are discussed in this volume, there are both good, clear photographs (tremendously improved over those in earlier volumes) and well drawn, measured, and oriented plans or diagrams, with cross references from photograph to drawing. Reconstructed drawings and models are few, but well representative and convincing. The tables which condense pertinent "information regarding provenience or location, dimensions, appearance, etc., of architectural and structural features, household equipment, important rooms, etc." are especially useful. It is a pleasure to find a volume, the contents of which are so valuable and worthy of reference, arranged with such thought to make it easily usable. The bold face type for paragraph headings is another boon. There are remarkably few printer's errors; a few that were noticed may be mentioned: on p. 92 for A vi 5 read A vi 6; on p. 125 for A vi 3, i read A vii 3, i; on p. 178 for B xii 2 read B vii 2; on p. 248 for A xii 2 read A xii 10; on p. 334 for A 11, h read A 11, g if p. 84 is correct. Nos. 16, 17, 18 in the Table of Pillar Capitals on pp. 242-243 are certainly more correctly identified as bases as suggested there and as drawn on pl. 61, 2-4. It is to be regretted that the photographs on pl. 57, 1a, 2a, 3a were presumably taken before the blocks were studied and therefore show them as crowning blocks.

The authors are to be congratulated on a carefully recorded, well assimilated, correctly evaluated, and well documented presentation of material which makes a real addition to our evidence for one of the outstanding periods of Greek civilization.

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THE HISTORY OF THE GREEK AND ROMAN THEATER, by Margarete Bieber. Pp. x+465, figs. 566. Princeton University Press, 1939. \$7.50. The purpose of this beautiful, even sumptuous,

volume is to reconstruct "the history of the development of the ancient theater" and its drama by "uniting the literary, architectural and figurative sources." Previous books have placed the "chief emphasis on the philological and literary side," or like the author's own Denkmäler zum Theaterwesen im Altertum (1920) have presented exclusively or almost exclusively the archaeological evidence. The present book "is an attempt to make a synthesis, to construct out of the various elements a connected whole, a history of the theater in the ancient world" (p. vii). The plan of the book is unusual. The development of the theater building and the development of the drama and dramatic art are traced pari passu from period to period. This is refreshing and illuminating. Professor Bieber merits our thanks and our congratulations for writing a volume so comprehensive, so well arranged and so abundantly illustrated.

The synthesis, however, which results from her treatment is not a balanced union of the several kinds of evidence. There is a preponderant emphasis upon the archaeological material even in such chapters as that upon Attic tragedy and the two upon Greek comedy. Thus a little more than one page of text is devoted to Sophocles; about six pages of text to Euripides, of which, however, not less than five contain a discussion of a relief and of vase-paintings that illustrate some of his plays. Aristophanes and the other Greek writers of comedy fare no better, perhaps even worse. This skimping of the literary and dramatic aspects of the subject, especially as concerns Greek drama, constitutes the chief blemish of this otherwise admirable book. In the chapters on Roman drama the disproportion is less noticeable.

The first chapter is entitled "The Rise of the Satyr Play and of Tragedy." The author takes her stand firmly on the statements of Aristotle concerning τὸ σατυρικὸν and τῶν ἐξαρχόντων τὸν διθύραμβον. "All attempts to find other sources for the origin of tragedy are . . . to be dismissed" (p. 7). The dithyramb "was performed by men in the disguise of the demonic followers of the god, with equine ears and tails" (p. 7). By τὸ σατυρικόν Aristotle meant satyr play (p. 9). Tragedy developed from the satyr play; satyr play, from dithyramb. But it requires wizardry to convert equine creatures into goats ("tragoi"). The explanation adopted is the old theory that the satyrs danced around the goat, sacrificed it, devoured its flesh, made themselves a dress out of

its skin, and then felt themselves to be goats (p. 22). But it is unconvincing, and "the greatest problem," "why the word tragedy contains tragos" (p. 17), remains as far from solution as before. There is no reference to Brommer's Satyroi (1987).

Loose and inaccurate statements occur not infrequently. The following are a few of these. "Drama, then, derives its material from the epic. . . . Its form, however, comes from . . . lyric poetry" (p. 4). "The Greek poem was never read or spoken, but intoned" (p. 4). "This actor's costume appeared strange and absurd to the Romans" (p. 44). The reference is to Lucian! "The comedies were given in the evening, as is proved by a passage in the 'Birds' of Aristophanes (vv. 785 ff.), where the advantages of flying are extolled: among them the power the spectators would gain of . . . going home to dinner," etc. (p. 98). Here "evening" is obscure and "dinner" (ἡρίστησεν) wrong. "That the tragedies were played in the morning, before the comedies, follows from the fact that several of them begin with a scene at dawn" (p. 98). It is annoying to find appended to this absurd statement-let the Clouds and the Wasps refute it - a reference to my article: On the Program of the City Dionysia, etc. (1938). οὐκ ἐμὸς ὁ λόγος. "Sophocles . . . offers no less material in a single play [the Electra] than Aeschylus in his three works [the Oresteia]" (p. 47). This is not true. The action of the Eumenides has no counterpart in the Electra of Sophocles. In the Electra of Euripides it has. "In the 'Hiketides' [of Aeschylus] the fifty Danaids are the protagonists throughout. . . . Only one player confronts them, never more" (p. 31). This also is not true. The Hiketides is a two-actor play. "This union of Doric and Attic elements was never so close in comedy as was the union of the Peloponnesian chorus with Attic dialogue in tragedy" (p. 73). The Birds and the Thesmophoriazusae belie this. It is startling to find the Acharnians and the Birds linked together as the "older plays" of Aristophanes (p. 86). The date assigned to the Cyclops of Euripides is "about 410 B.C." (p. 15). This date appears to have been taken from Marquart's dissertation (1912), but the best recent editors of Euripides reject it. The date of the Ichneutae, "about 460 B.C." (p. 15), is of course uncertain. The date of the Lysistrata was not 414 (p. 66, 429). Aristophanes was not born in 425 (p. 429). This however is merely a misprint. On p. 429 the guild of Dionysiac artists is assigned to the fourth century; on p. 158, to the third. The spelling kothurnos (p. 41, etc.) is a strange hybrid.

There is a curious mistake on p. 101. This is that in the early theatre at Athens the wall which Dörpfeld reconstructed from the fragment R (Fiechter's SM1) is "in the opinion of Fiechter" "only a retaining wall for a road leading up to the orchestra terrace." Not so. Fiechter (Das Dionysostheater in Athen, I, 39) says that it was a retaining wall "die . . . den alten Spielplatz umgeben hat," and in III, Taf. 16, he indicates the road below the wall, not above it. We may note in passing that 27 meters are not 85 feet (p. 101). On p. 31 we are told that the early dramas of Aeschylus used "the full round of the orchestra," and on p. 99 orchestra is defined as "a circular dancingplace for the chorus." But if we adopt the view of Fiechter just referred to, that the retaining wall was the wall of a terrace and not of the orchestra proper, then there is no evidence that the orchestra of the theater at Athens ever had a "full round." Fiechter himself seems not to have observed this.

The account of the development of the Athenian theatre in the fifth century B.C. (pp. 99 ff.) is unavoidably sketchy. The fifth-century theatre cannot be reconstructed. "Only one thing is absolutely sure: that players and chorus appeared through the whole of the classical period [i.e., to the end of the fourth century at one and the same place, that is, in the orchestral area" (p. 109). "In the classical age there was no such thing as a raised stage" (p. 139). It is refreshing to find the discussion of the Vitruvian stage (pp. 253 ff.) embodied in the description of the late Hellenistic type of theatre. Fiechter's suggestion that a skenotheke "was built in the place where later the colonnade opening to the south was erected" is hailed as an "important discovery." But Fiechter's date is rejected in favor of "the first half of the fifth century" (p. 106). For my part I am skeptical about this skenotheke and venture the opinion that such a structure never existed.

The description of the Hellenistic theatre building (pp. 206 ff.) is long and very fine. About 300 B.C. the proskenion was introduced (p. 207). The suggestion (pp. 217 ff.) that the proskenion was modeled after a type of building common in Asia Minor, but found also elsewhere, in which a colonnaded projecting structure "with a flat terrace at the level of the second story" extends "the width of the entire building" (see figs. 307—

314), is a brilliant contribution, probably the most original single item in the book.

There is an excellent chapter on the Phlyakes (pp. 258 ff.) and five chapters on Roman drama and the Roman theatre. These are all very fine. The chapter "Roman Theater Buildings in Italy and the Provinces During the Empire" contains (pp. 385 ff.) the account and description of the Neronian and later remodelings of the theatre at Athens. This is an electrifying innovation. This beautifully illustrated and richly documented book is a welcome addition to the literature of the Greek and Roman theatre.

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ZUR DATIERUNG ATTISCHER INSCHRIFTEN, by Emanuel Loewy, Sitzungsber. Ak. Wien 216, Abh. 4. Pp. 30. Wien and Leipzig, Hoelder-Pichler-Tempsky A.-G., 1937. RM. 1.55.

DER BEGINN DER ROTFIGURIGEN VASENMALEREI, by Emanuel Loewy, Sitzungsber. Ak. Wien 217, Abh. 2. Pp. 104. Wien and Leipzig, Hoelder-Pichler-Tempsky A.-G., 1938. RM. 5.50.

Professor Loewy died in the spring of 1938 before the second of the two present papers was published. His great contributions to general archaeology are well known, and his paper "Typenwanderung" (JOAI. xii, 1909, pp. 243–304 and xiv, 1911, pp. 1–34) can well be called the starting point of the modern treatment of archaic Greek sculpture.

These papers (abbreviated henceforth to: Datierung; Beginn) must be understood in relation to the author's attempts to connect the invention of the red-figured style with Polygnotus (Beginn, p. 103). Since the appearance of his book Polygnot, the author has devoted several articles to this purpose, but at the end he found it necessary to review all the evidence we have for the chronology of the late sixth and early fifth centuries. Thus the reader will not find in Beginn anything about vase-painting itself. The method the author followed in both papers can be described as purely negative. He was careful to collect all objections which can be (or have been) advanced against single datings, perhaps without realizing that, in so doing, he sometimes left the realm of unbiased scholarship. In several instances, as we shall see, new evidence proves that his doubts were unjustified. Let us glance over the different kinds of evidence which support our chronology.

Inscriptions. The whole paper Datierung and several passages in Beginn are devoted to an examination of the chronology of early Attic inscriptions. I wish to emphasize that (with the exception of the few photographs in Kirchner's Imagines) the author had to study the letterforms from descriptions and from drawings, which for the most part were published about fifty years ago (Datierung, pp. 7 f.). He accepts the usual date for the inscription on Kallimachos' dedication (IG. i 2, 609; cf. Die Hampe, Ant. xv, 1939, pp. 168 ff.) and compares on several occasions its letter-forms with those of other inscriptions. He comes to the conclusion that the inscriptions IG. i 2, 504/5,627, and 1025 are contemporary with it (Beginn, pp. 95 ff., 100 ff., and 32); that means that Polias (the father of Euthymides), Andokides, and the painter of the stele of Lyseas have to be dated in the second decade of the fifth century. The dedication of the potter Euphronios (IG. i², 516) has to be dated in the later Cimonian period (Beginn, p. 94). The Hekatompedon inscriptions (IG. i 2, 3/4), on the other hand (when compared with IG. i2, 609), seem to the author to belong to the sixties (Datierung, pp. 3 ff.). Though knowing of Oliver's interpretation of the monument with the Marathon epigram (Hesp. v, 1936, pp. 225 ff.), the author does not hesitate (Datierung, pp. 6 f.) to date also the inscription of this monument in the Cimonian period, since it is engraved by the same hand as IG. i2, 3/4 (compare Lauffer, AM. lxii, 1937, p. 98). It is (with regard to the references given above) not necessary to accept these dates (compare Austin, Stoichedon, note on pp. 6 f.). The author suggests (Datierung, pp. 12 ff.) a new date also for the inscription on the altar dedicated by Peisistratos, son of Hippias (IG. i², 761). The letter-forms, he argues, do not agree with the early date of the inscription (compare Hesp. viii, 1939, p. 164, note 1), and the fact that Thucydides called the letters άμυδρά (vi, 54, 6) shows that he cannot have seen the inscription which has come down to us (compare Lauffer, AM. lxii, 1937, p. 110). His conclusion is that the letters, which originally were only painted, were engraved in the late fifth century. The inscription has now been dated in the year 497/6 B.C. (Meritt, Hesp. viii, 1939, pp. 62 ff.), and this date is in keeping with the letter-forms of other inscriptions of that time. Among the inscriptions which are connected with sculptures, the author discusses the potter relief (with the inscription IG. i², 718; Beginn, pp. 94 f.) and the

dedication of Nearchos, signed by Antenor (IG. i 2, 485; Beginn, p. 58). He rejects Payne's early date for the potter relief and suggests for this monument a date after 460 B.C. (the relief has now been dated by Schuchhardt about 500 B.C.; compare Schrader, Archaische Marmorbildwerke, pp. 301 f., no. 422). For the inscription on the base of Nearchos' dedication the author proposes a date not before 500 B.C. (repeated in Scritti in onore di B. Nogara, p. 249). The letter forms of this inscription are, according to Austin (Stoichedon, p. 9), "a little earlier than those of the Salaminian decree." But the latter inscription may very well be later than 500 B.C. (Datierung, p. 11; compare JOAI. xxxi, 1938, Beiblatt, cols. 39 ff.). Yet the connection of the pedestal with the kore no. 681 (which has been doubted by Payne) is now again confirmed (Langlotz in Schrader, Archaische Marmorbildwerke, pp. 82 ff., no. 38; compare Bull. Bulgare xii, 1939, pp. 139, note 3, and 141, note 6), and in view of this fact a date as late as 500 seems unreasonable.

Ostraka. The author's discussion of the letterforms of the inscriptions on ostraka is based on the few examples which were then published and illustrated (Datierung, pp. 23 f.; Beginn, pp. 90 f.; compare Shear, Hesp. vii, 1938, pp. 361 f.; viii, 1939, p. 246). A glance over the illustrations of the 190 ostraka of Themistocles which can be dated in the year 482 B.C. (Broneer, Hesp. vii, 1938, pp. 228 ff.) shows all the different letterforms which we must suppose existed in this year. But Broneer's magnificent publication gives also an answer to another problem. Loewy states that the earliest ostrakon which was once part of a red-figured vase belongs to the year 443 B.C. and adds that the still unpublished ostraka found in recent excavations agree with this statement. He does not consider, however, that many of the black-glazed sherds (which were used for ostraka) may be contemporary with red-figured vases. The profiles, moreover, of the kylix bases which were used for the Themistocles ostraka indicate clearly that they belonged to a type of cup which was painted in the red-figured style exclusively and which can be dated according to the profiles as well as to the paintings in the early fifth century. Thus, the ostraka not only do not support the author's theory, they even refute it.

Love-Names. Only little space and little importance is given to the love-names. The author infers (Beginn, pp. 4 f.) that the identifications ought to be made when the dates of the vase-

paintings are already established, for the same names occur again and again in the same families. This argument is applied in the discussion of the Megakles pinax (Beginn, pp. 91 ff.). But since the author dealt with this problem elsewhere ('Eq. 1937, p. 563), I should like to point only to one conclusion he is led to draw. He adopts for Phayllos' dedication (IG. i 2, 655; compare Hesp. viii, 1939, pp. 156 f., no. 4) the date of ca. 470 B.C. (Datierung, p. 9), but he cannot agree to the usual dates of the vase-paintings which contain Phayllos' name (Beginn, pp. 98 ff.). He assumes that Phayllos' fame as athlete and his dedication on the Acropolis induced the painters to put his name on the vases at a time when Phayllos was already in his fifties. Thus, in the one instance where the identity of historical personality and καλός-name cannot be denied, the author must assume that the καλός-inscriptions (which all belong to the same period) have nothing to do with the age of the man who is praised.

Vase-painting. The author adopts (Beginn, p. 3) the established relative chronology. It is only the absolute date of the beginning of the redfigured style he wishes to argue, though he realizes that the date he proposes would press the entire development of the early red-figured style in the two decades after 480 B.C. (Beginn, p. 102, note 2). Only in one instance does he discuss the style of vase-paintings (Datierung, pp. 21 f.), when he proposes for the earliest Panathenaic amphorae a date as late as the beginning of the fifth century. That this date need not necessarily be accepted is shown by two recent papers which seem to confirm the conventional dates (Ashmole, Royal Num. Society Transact. 1938, pp. 17 ff.; Papaspyridi-Karouzou, AJA. xlii, 1938, pp. 495 ff.).

Sculpture. The author generally adopts the method of comparison with dated sculptures and reliefs to determine absolute dates for vasepaintings (Beginn, pp. 5 f.). He adds, however, that vase-painters may have copied works of the major art, so that vase-paintings must be dated later than sculptures or reliefs with which they can be compared. The sculptured fragments from Ephesus, which have been compared with vasepaintings of Exekias, may, according to the author, very well belong to the end of the sixth or even to the beginning of the fifth century, since none of them can actually be connected with the Croesus dedications (Beginn, pp. 6 ff.; compare Rumpf, Critica d'Arte xiv, 1938, pp. 45 ff.). In discussing the sculpture from the Aphaea temple in Aegina (Beginn, pp. 8 ff.) the author rejects the different theories which connect the destruction of the temple with more or less well dated historical events. He feels free to date the sculptures after the Persian wars, since a comparison with the Tyrannicide group reveals that the pedimental sculptures are later than this group. The Olympia sculptures are mentioned in this connection, but significantly no use is made of the fact that these sculptures are accurately dated. The author should have considered this fact when dating the treasury of Athens in Delphi in the "sixties or even later" (Datierung, pp. 14.ff.; Beginn, pp. 13 ff.). In his discussion of the sculptural remains of the treasury of Siphnos (Beginn, pp. 16 ff.), the author cites as closest parallel for the north frieze the sculptures from Aegina and the reliefs with Hermes and the Nymphs from Thasos. He does not adopt the usual interpretation of the mutilation of the artist's signature; he believes that the entire inscription was engraved at once and interprets the letter-forms as archaistic. And archaistic is the style of the reliefs, too. The designs for the reliefs may have been made earlier, but the earliest part of the sculptural fragments are the caryatids, which are contemporary with the Euthydikos kore (compare the interesting discussion of Rumpf, Critica d'Arte xiv, 1938, pp. 237 ff.). The sculptures of the Hekatompedon, usually dated about 520 B.C., are certainly later than 480 B.C. (Beginn, pp. 55 ff.) and can be dated with some probability about 465 B.C. (compare Schrader, Archaische Marmorbildwerke, pp. 345 ff.).

Excavations. On more than forty pages the author discusses the excavations made on the Acropolis (Beginn, pp. 33 ff.). His purpose is to show that none of the objects found in the "Persian" débris was actually buried shortly after 480 B.C. Thus, red-figured vases found in these strata need not be dated prior to this year (Beginn, p. 64). The date of the strata south and east of the Parthenon are closely connected with the date of the older Parthenon, a problem which the author touches without indicating where he stands (compare Dinsmoor, Proc. Am. Philos. Soc. lxxx, 1939, pp. 119 ff.; Broneer, Hesp. viii, 1939, pp. 99 f.). The strata on the north wall where the fourteen korai were found are closely connected with the erection of this section of the north wall itself, which contains parts of the architecture of the Hekatompedon. Since this temple was built about 465 and destroyed not long before 438, this part of the north wall and the strata which were filled against it can be dated not earlier than about 440 B.C. (Beginn, pp. 52 ff.; compare Holland, AJA. xliii, 1939, pp. 296 f.). Next to the Persian débris, the red-figured plate, fragments of which were found in the Soros at Marathon, has the utmost importance in our chronology of the red-figured style. After a long discussion (Beginn, pp. 74 ff.) the author asserts that this plate may have been buried long after 490 on the occasion of a later celebration of the anniversary of the battle. The lack of careful excavations and publications of the vases found at Miletus gives the author the occasion (Beginn, pp. 84 ff.) to discredit the occurrence of red-figured sherds at the site of this town which was destroyed in 494 B.C. There are, finally, two places where we might have expected to find red-figured sherds, but where actually none were found. That is the Olympieion in Athens (Beginn, pp. 88 f.) and the tombs in Megara Hyblaea (Beginn, pp. 89 f.).

The excavations on the Acropolis were made when the technique of digging was still in its beginning. The publication of the recent excavations made in the Kerameikos may furnish us with a sound relative chronology. From the publication of the excavations in the Athenian Agora we have good reason to expect (among so many other results) new evidence for our chronology of the early red-figured style (compare Talcott, Hesp. ii, 1933, p. 230 and v, 1936, p. 333, note 2; Vanderpool, Hesp. vi, 1937, p. 434 and vii, 1938, pp. 363 ff.).

It seems clear to me that the author has not succeeded in making a true bill against the current chronology of the sixth and fifth centuries.

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Corpus Vasorum Antiquorum. United States of America, Fasc. 7: The Robinson Collection, Baltimore, Md., Fasc. 3, by D. M. Robinson with the assistance of Sarah E. Freeman. 62 pp.; 44 pls. Cambridge, Mass., Harvard University Press, 1938. \$5.00.

CORPUS VASORUM ANTIQUORUM. France, Fasc. 14: Louvre, Fasc. 9, by N. Plaoutine, under the direction of E. Pottier and A. Merlin. 63 pp.; 48 pls. Paris, Champion, 1938. 130 Fr.

Professor Robinson and Miss Freeman here present a catalogue dealing with the remainder of the Robinson Collection, plus the collection of

the late Esther Van Deman. There are two b.-f. pieces; two earlier r.-f. (Makron; Pig Painter); a number of later Attic and Italiote r.-f. pieces; various plain vases; and miscellaneous Italic examples down through terra sigillata. At the end of the text is an index to the three fascicules of the Robinson Collection. The text is, as one would expect, rich in illustrative parallels; the descriptions are thorough and accurate and questions of style are soundly treated. The photography is of an exceptionally high standard for the Corpus: the large scale of most of the reproductions is especially pleasing. In brief, the whole work is a worthy companion to its two predecessors.

Pl. 17, 1: the "aryballos" of each side may be a poorly-drawn pair of *halteres* (note especially side B).

Pl. 17, 2: cf. Robinson-Harcum-Iliffe, Toronto Vases, Pl. 73, No. 401.

Pl. 18, 2: the reference to Trendall, No. B. 63 is out of place here; it is correctly given for Pl. 19, 2. As to the statement that the vases of CVA. Lecce 1, IV D r, pl. 7, are "typical of the style of the Creusa Painter": all the specimens figured on the plate cited are now given by Trendall to the Amykos Painter. It is nevertheless true that the Robinson vase stands close to the Creusa Painter.

Pl. 23: isn't the "tray" on each side a phiale? Pl. 24: cf. Robinson-Harcum-Iliffe, *Toronto*, Vases, Pl. 62, No. 394.

Pl. 25: there are similar amphoras in Naples (Patroni, Cer. Ant., pp. 138-139, figs. 93-94).

Pl. 25, 2 b: again a phiale? The white triangular fillers are debased ivy leaves rather than bucrania. Pl. 27, 2: add Patroni, pp. 146-147, figs. 105-

107; others in the Boston Museum. Pl. 32, 1: same shape and style of decoration, Boston P. 5664 and AP. 483; Masner, Vienna Cat., pl. 8, No. 494; Lau, Gr. Vasen, pl. 44, 3.

Pl. 32, 6: cf. Ure, Sixth and Fifth Century Pottery, pl. XII, 126.20, for bowl with similarly curving outline. Add to these Boeotian bowls Langlotz, Würzburg, pl. 229, No. 790 (there called "Etruscan").—What is meant by "Early Boeotian, 550-525 B.C."?

Pl. 33, 4: tongue-pattern.

Pl. 35, 1 ("no very close parallels have been found"): cf. CVA. Firenze 1, IV B k, pl. 3, 3 and pl. 3, 10, and the references there cited.

(See also the review of this Fascicule by J. D. B(eazley), JHS. lix, 1939, p. 153.)

The ninth Louvre fascicule contains several "Ionic" cups; a series of Corinthian and Italo-

Corinthian alabastra; eight Caeretan hydriai; Attic b.-f. cups (two pieces by the Amasis Painter); and more r.-f. hydriai (Ladies' Bath Painter; "probably Aigisthos Painter"; a fine piece by the Nikias Painter; and others, attributed by Beazley). Since most of the better vases were already published or discussed elsewhere, the text emphasizes description, interpretation and bibliography. Most laudable is the conscientious description of breaks, repairs and restorations, a precaution particularly necessary for the Caeretan hydriai. Although the text is notably satisfactory, the photographs are often dingy, and many are too small to be useful for detailed study.

II D. Pl. 2, 6, and perhaps some others, Attic? III C a. One doubtful piece (pl. 32, 2) is noted by the author. References to Payne's Necrocorinthia are frequent and helpful.

HI C b. Some are possibly Corinthian (noted by the author): pl. 1, 1-3, 15, 16, 21; pl. 5, 17 (pl. 6, 20-26 are certainly Italic). pl. 3, 27: for the raised band on the body, cf. Sieveking-Hackl, München, pl. 29, No. 275. Pl. 4, 14: for the odd shape, cf. Mingazzini, Coll. Castellani, pl. 31, 6 and 8. Pl. 7, 22-23: mule, rather than doe?

III F a. Text, p. 4, line 1: for "Pl. 13, No. 3," read "Pl. 12, No. 6." Pl. 4, 3: the scabbard at the figure's waist is not mentioned in the description. Pl. 7, 3: note that the incised contour of the helmet is broken to show that the spear passes in front of the figure's head; and that the red of the helmet does not encroach upon the line of the spear.

III H e. Pl. 83, 3/6 = Hafner, Viergespanne, p. 7, No. 47: band cups of this kind, though difficult, may lend themselves to connoisseurship. Cf., for example, CVA. Scheurleer 2, III H e, pl. 5, 8/9, which Scheurleer attributes to the same hand as CVA. Villa Giulia 3, III H e, Pl. 27, 4/Pl. 28 (his reference to FR. iii, pp. 219-220, pl. 153, 1 is less apt); CVA. Brit. Mus. 2, III H e, pl. 17, 3; and Clara Rhodos viii, p. 200, fig. 196 (fragments of a plate). Pl. 88, 11-13: shape and syntax are "Siana," but some clear distinction should be kept between this later, degenerate type and the fine, earlier pieces of the time of the "C" Painter; similar in style to this cup, though still later, are the kotylai in Ure, Sixth, etc., pls. 19-21. Pl. 89, 6/7 and 9/10: there can be little real doubt that these cups are Attic; the style, with its peculiar distortion of animals and its coarse incision, has a "sub-Tyrrhenian" look: cf. the dinos, CVA. Brussels 1, III H d, Pl. 2, 1.

III I d. Two Italiote vases (noted by the author) are included: one (pl. 50, 7, pl. 51, \mathfrak{L}) = Trendall, Frühit. Vasen, p. 35, No. A. 147 (Amykos Painter); the other (pl. 51, 9) may be by the Pisticci Painter (cf. especially Trendall, No. A. 43 = L'Italia Antichissima, fasc. v, p. 224, fig. 5), although it is impossible to be sure from the published photograph. Pl. 51, 3-5: identification of the subject as Peleus and Thetis is ingenious but perhaps not fully supported; why would Peleus be pursuing Thetis with drawn sword?

D. A. AMYX

CHICAGO, ILLINOIS

CORPUS VASORUM ANTIQUORUM, DEUTSCHLAND: BERLIN, ANTIQUARIUM, Band 1, by Richard Eilmann and Kurt Gebauer. Pp. 40, pls. 48. Munich, 1938; C. H. Beck'sche Verlagsbuchhandlung. RM. 18.

The second German fascicle of the CVA includes all the Proto-Attic pottery in the Berlin Antiquarium. In addition to nine pieces which have been for some years in the possession of the museum a large group of more or less fragmentary vases is published for the first time. This group, we are told, was found in Aegina before 1916. Unfortunately the Protocorinthian, Corinthian, and local Agginetan vases found with it could not be included in the publication. The necessity to complain of this omission in the case of one of the very few volumes of the Corpus containing a homogeneous collection of vases all of the same fabric is, perhaps, an irony; yet the inclusion of at least the Corinthian wares would have greatly increased the value of the group.

The forty-six vases—including hydriai, amphoras, lids, bowls, kraters and krateriskoi of various forms on plain and fenestrated stands, as well as stands made independently—are dated from the late eighth to the beginning of the second half of the seventh century. They are divided by the authors into three groups on technical grounds of clay and glaze. This grouping is of little chronological or stylistic significance; we may note that a vase from each group (A 32, A 31, A 33) is attributed to the hand of the same painter. The use of slip is of interest; the fugitive nature of the glaze is more characteristic of the earlier vases.

After the discussion of the fabric a list of painters is given. The painter of the Ram Jug and the Nessos painter are already familiar; several new

hands are recognized. Unfortunately we are given bare lists of attributed vases without analysis of style. The list of vases assigned to the hand of the painter of the Ram Jug does not entirely agree with the attributions of Cook (BSA. 1934-35, p. 189 f.). Characteristic of this painter would seem to be his variety of method: on one vase (A 32) he employs outline drawing, with details rendered in glaze, and sithouette with details incised or added in white. It does not seem certain that the Burgon krater and the small oinochoe by the same hand (no. 9 on the list) should be attributed to him; nor is the Agora fragment (no. 7) well enough preserved to admit of a safe attribution. The two vases assigned to the hand of the "Painter of the Protome Amphoras" can hardly be by the same hand. There is little reason to put together the Agora fragments Burr 147 and 157, or to attribute them to the hand of the "Pferdemaler." Although the grounds on which attributions are made are not given and the style is not analyzed, there is a careful and thorough description of each piece.

A 1 (pl. 1 and fig. 1): with the Louvre amphora MonPiot xxxvi, p. 1, one of the earliest representations of players on the double flute. A 11 (pl. 4, 4): an early horse protome amphora; perhaps under Cycladic influence, but surely to be dated well after the middle of the century. A 9 (pl. 5): Herakles and Cheiron, with perhaps the earliest representation of a bear in Greek art. A 17 (pl. 9, 1): it is not certain that the rim fragment belongs; if not, the fragments may well belong to a late Geometric amphora like one in Oxford (Cook, fig. 5) and Athens 897. A 27 (pl. 16, 2): the foot fragments are subgeometric and probably do not belong to the krater. A 32 (pls. 18-22): the hairy single figure under the handle at one side is surely a monkey; compare the monkey on the Protocorinthian fragment from Aegina, AM. 1897, p. 309, fig. 31 b (McDermott, no. 35) and on a Caeretan hydria, illustrated in Morin-Jean, fig. 103. A 45 (pl. 36, 2): decorated with a lotus band and retouched with red; hardly to be dated much before the end of the third quarter of the century. Red is used on only three vases of the Aegina group: A 45, A 11 (the horse protome amphora mentioned above), and A 34, assigned to the "Frauenmaler," of whom other works have been noted by Cook as transitional from Middle to Late Proto-Attic. A 46 (pl. 37, 1-2): perhaps fragments of a large lid; a profile would be helpful here. Pl. 39: 5, a fragment of an Attic oil am-

phora; 7 and 34 are Geometric; 63 the handle of a cup of the same type as inscribed cups from Mt. Hymettos (AJA. 1934, pls. I-II).

Of the other Proto-Attic vases in the Berlin Museum one, an amphora (pl. 41, 3-4), is listed in Neugebauer's guide, but has not been illustrated before. An oinochoe (pl. 45, 2-4) and two bowl fragments (pl. 48; one of them illustrated by Cook, pl. 59 b) are new, despite the fact that one of the latter was found in Aegina with the Gorgon bowl by the Nessos painter. The hydria (pl. 40) has been attributed by Cook to the Mesogeia painter. The list is completed by another amphora, the Gorgon bowl, the oinochoe found with the Hymettos amphora, and the Hymettos amphora itself. The last proved, when taken apart for cleaning, to have been built up of strips of clay 7.5 cm. wide and fastened together with lead clamps. The date assigned to it at the end of the eighth century is undoubtedly too early.

In the group of vases from Aegina the Berlin Museum possesses perhaps the most interesting and important collection of Proto-Attic pottery. It is much to be deplored that it was deemed inadvisable to give more detailed information as to the place and manner of finding. The vases cover the first three quarters of the seventh century and fit well into Cook's classification. The latest Geometric style is scantily represented; the great majority of the pots belong to the Early Proto-Attic or the "Black and White" style, and there are three or four pieces of the period between the Kynosarges amphora and the Nessos painter. The editors have done admirably in the careful and detailed description of their material, and the illustrations leave little to be desired. Later studies of the Berlin vases from Aegina should shed much light on the development of the Proto-Attic style, as well as on the influences of other orientalizing styles upon it. It is to be hoped that as an aid to such studies the publication of the other wares represented in the Aegina find will not be long delayed.

RODNEY S. YOUNG

AGORA EXCAVATIONS
ATHENS

KATALOG DER GOLDSCHMIEDE-ARBEITEN, MU-SEUM BENAKI, by Berta Segall. Text vol. and portfolio. Pp. 220, pls. 69. Athens, Pyrsos, 1938. RM. 65.

Of the nearly 400 entries in the catalogue, more than half belong to the period of Greek and

Roman art, from the seventh century B.C. to the fourth of our era. This is by far the largest single group, and the mainstay of the collection. Within this group, the earlier periods are weak and the real interest of the collection, artistically speaking, begins in the Hellenistic period with the great diadem from Thessaly and the objects associated with it. Minoan-Mycenaean art claims four entries at the first of the catalogue, and the rest of the material is evenly divided, numerically, among the Byzantine-Mediaeval art of the Eastern Mediterranean, Islamic, and modern work. A few pieces of gold and silver plate appear among the jewelry, an intrusion which the reader will not be disposed to criticize; the book is the richer particularly by an excursus on a prehistoric gold bowl from Euboea. Topographically, the collection stems from Greece and the East, pieces from Italy and the western Roman provinces being absent.

The author's method in general is to date each item as nearly as the evidence allows, and to present the evidence in detail so far as it exists. Lists of parallels have been avoided, bibliography on the other hand has been fully included when it bears on the problem in hand. Through this treatment of a fairly extensive collection, the catalogue becomes another of the few important landmarks in the quarter-century which has followed Marshall's arrangement of the British Museum collection of jewelry. The present work brings an important collection before the public; its further function will be that of a handbook and work of reference. As such its scope is limited to certain categories of ancient jewelry-the absence of Etruscan products is the largest hiatus. On the other hand its usefulness is enlarged by the wealth of post-classical material. The good representation from the Islamic and Christian workshops gives the book a unique value. The illustrations should be source material for designers.

There are many typographical curiosities, and the author has disarmed criticism by mentioning some of the difficulties which attended the printing. In the illustrations the difficulties were surmounted, and author, photographer, and printer have produced admirable results. Each piece is illustrated, and details of the more important items are included. The reader will be especially grateful for back views.

The book is appropriately offered by the author to her teacher, Robert Zahn.

CHRISTINE ALEXANDER
METROPOLITAN MUSEUM OF ART

The Cults of Lanuvium, by A. E. Gordon.
Publications in Classical Archaeology, Vol. 2,
No. 2, pp. 21–58. Berkeley, University of
California Press. \$.35.

Lanuvium is a place which deserves more attention than it usually receives. It has many historical associations, its cults afford important material for religious history, the site is full of interesting antiquities, and the town itself is one of the most delightful spots in the Alban Hills. Mr. Gordon's monograph on The Cults of Lanuvium does full justice to the subject. The author has collected a considerable bulk of evidence from all possible sources, literary, epigraphic, numismatic and archaeological. The detailed discussion of modern literature on the subject sometimes seems unnecessarily full. One is inclined to wish that Mr. Gordon had relegated more of it to the footnotes and kept the text more closely limited to his own observations.

The material is divided into sections which comprise an historical introduction, the public cults, in which are included the priesthoods, and the private cults. Juno Sospita and the serpent festival receive the most attention and the author concludes that there was probably no connection between the two. He rejects the theory which attributes a chthonic character to Juno Sospita and is inclined to interpret the title as "Mistress of the moon" (*sid(e)s-potis). He includes a discussion of the temple of Juno, in which he dates the different phases of the building on the evidence of the decorative terracottas. It is quite true that these may be as late as the first century of the empire, but it is still hard to believe that the foundations built of peperino and with no concrete anywhere about them could possibly be so late. It would be quite natural for the rather fragile revetments to be repaired at intervals, whereas the excellent stone construction of the podium would be left as it was in republican times.

The nature of the evidence for the serpent festival makes the problem of its relation to Juno very difficult, but Mr. Gordon is very persuasive against any connection. The argument for a Greek origin of the serpent festival does not seem quite so convincing. Considering the universal respect for snakes shown by the human race, it is not at all surprising that both Greek and Roman religion should possess snake cults. One might question the weight attached to "Professor Rose's criterion for primitive culture in Latium" (cited from p. 40 of the latter's *Primitive Culture in*

Italy), to the effect that the existence of a Greek parallel proves the non-Italic nature of a cult or rite. The importance of the snake in the cult of the Genius also seems to be underrated.

The association between Juno Sospita and Hercules upon which the author comments is interesting. The identification of the great wall at the south of the town as the temple of Hercules has always seemed to me hazardous. The proportions of a temple which measured 33 m. x 11 m. would, as far as I know, be unique in the district and the period to which it is assigned, and would be remarkable anywhere.

The nature of the evidence leaves unanswered many questions about the priesthoods of Lanuvium, but it is very useful to have all the evidence together. We may thank the author for filling in another gap in the collected material on local cults.

Agnes Kirsopp Lake

BRYN MAWR COLLEGE

Römische Kopien Griechischer Skulpturen des IV. Jahrhunderts von Chr., by Carl Blümel. Katalog der antiken Skulpturen im Berliner Museum. Vol. V. Pp. 46, pls. 80. Berlin, Verlag für Kunstwissenschaft, 1938. RM. 36.

This is Volume V of the catalogue of ancient sculpture in Berlin, but the third and last volume of classical sculpture. Vol. III, 1928, dealt with the Greek original sculptures of the fifth and fourth centuries B.C.; vol. IV, 1931, with Roman copies of Greek sculptures of the fifth century. The present volume publishes Roman copies of the fourth century B.C. It contains, moreover, some copies of fifth-century sculpture, such as the excellent copy of the shield of Athena Parthenos, K 252, p. 33, pls. 73-74, and the herms, K 207-8, p. 9, f., pl. 21-22; also as a supplement to vol. III, eight original pieces, K 254-261, pp. 37-40, pls. 77-80. On p. 36 are some additional remarks on sculpture published in the two former volumes. A useful index for all three volumes is added at the end (pp. 43-46).

The arrangement and type of description is the same as in the previous volumes: for each piece there is a notation of marble, measurement, origin, restorations, short and concise characterization of the type, artistic school, date, replicas. The bibliography is divided into: (a) references to the old descriptive catalogue by Conze, photographs, casts; (b) main bibliography; (c) type; (d) occasional short notes. The plates are again of

high quality. Most pieces are well known, but of almost all there are better reproductions than those hitherto published, e.g., the important series of portraits, K 190-206. For several sculptures photographic views are given for the first time, thus for the "Paris of Euphranor," K 219, p. 15 f., pls. 33 and 41. I overlooked this fine replica when I discussed the variations of this type in Skulpturen und Bronzen in Kassel, p. 22 f., Nr. 26, pls. 24-25. Other sculptures are published for the first time, such as the excellent replica of the torso of "Apollo Lykeios," K 228, p. 19 f., pls. 40-41. The evaluations are mostly sound; e.g., that of the female head found by Schliemann at Alexandria, K 205, p. 8, pl. 19, where the author rightly disapproves of Eduard Schmidt's attempt (JdI. 47, 1932, pp. 281 ff.) to separate this head from the statuette in Compiègne with the same type of head and the inscription Korinna (Reinach, RA. 32, 1898, p. 161, pl. 5; 36, 1900, p. 169, pls. 2-3. Cf. also Bieber in Thieme-Becker, Künstlerlexikon xxxi, s.v. Silanion, p. 20).

Before publishing the sculptures Blümel had many of the modern restorations removed. A good example of how the stylistic impression is improved by this process is seen in the statue of Antiphanes of Paros, K 237, p. 23 f., pl. 51. The literature is mostly complete; one misses some more recent references which probably were unknown to Blümel at the time when he gave the volume to the press. Examples: to Apollo Lykeios, K 227, p. 19, pl. 39, ivory replica found by Shear in the Agora at Athens (Shear, AJA. xl, 1936, pp. 403 ff., fig. 1; also Hesperia vi, 1937, pp. 348 ff., figs. 13-14; Karo, AA. 51, 1936, pp. 107 and 114, fig. 7). - Athena of Timotheos, K 239, p. 25, pls. 53-55, Bieber, Thieme-Becker, Künstlerlexikon xxxiii, 1939, s.v. Timotheos.-Copy of "Ariadne" from South slope of the Acropolis, K 251, p. 32 f., pls. 71-72; Götze, RM. 53, 1938, p. 225 f., note 1. - Götze, op. cit., p. 208 f. for addenda to p. 36 about the regaining of the head of Theseus, K 187, IV, pl. 37, p. 47 f.

There are only a few, mostly minor points where one would like to challenge the assertions of Blümel. The chiton of Artemis, K 249, p. 30 f., pls. 68–69, is described as short, while it is really a normal long chiton only shortened by a long pouch pulled up between two girdles. The "Ariadne" from the south slope of the Acropolis (which I saw last when on exhibition at the World's Fair at New York), from which Berlin K 251 is copied, I still prefer to consider an orig-

inal (cf. also Götze, loc. cit.). The type of the herm, K 207, p. 9, pl. 21, I consider with Curtius (Zeus und Hermes, pp. 69 ff.) a creation of the classical period, to be dated not before the time of Pheidias, whereas Eduard Schmidt, Archaistische Kunst, pp. 44 ff., Waldhauer, Antike Skulpturen der Eremitage i, pp. 68 ff., Nr. 53, pls. 31–32 and Furtwängler-Wolters, Beschreibung der Glyptothek, 180, No. 200, whom Blümel follows, date the type in 470 B.C. Forehead and eyes are conceived in the spirit of the Periclean Age.

The beautiful throne, K 253, p. 33 f., pls. 75-76, has a replica in Boston, which Hauser and Möbius (AM. 51, 1926, p. 120) regard as a modern forgery, while G. Richter (Ancient Furniture, p. 13), who has seen the original, regards it as genuine. Although I could examine the throne only from a distance, I am of the opinion that it is a Neo-Attic copy of an original of the Lycurgan period. This I believe to be true also of most of the thrones in the theater of Dionysos, when after the destruction of Athens by Sulla in 86 B.C. the seats of honor were replaced by copies (Bieber, The History of the Greek and Roman Theater, p. 240; cf. Fiechter, Antike Theaterbauten, Dionysos-Theater i, pp. 62 ff., figs. 54-5 and 58; iii, p. 55; Sven Risom, Mélanges Holleaux, pp. 257 ff., pls. VIII-XI; Möbius, in AM. 51, 1926, pp. 121 ff., pls. XIX-XX). Perhaps the same applies to the two seats in Munich, Furtwängler-Wolters,2 Nos. 327 and 346, the first of which is considered by Diepolder to be a modern copy of the second (cf. AA. 53, 1938, p. 414 f., note 5).

The last eight sculptures presented by Blümel are valuable additions to our knowledge of small Greek originals: K 254, a forerunner of the metopes of the Heraion at Selinunte; K 255, an Attic head of ca. 480-470; K 256, a painted limestone relief of Medusa ca. 440; K 258, a rare marble doll ca. 400; K 259, a head from a Tarentine tombstone of ca. 350-340 B.C.; K 257, though found in Andros, seems to me to belong to the group given by Bruno Schröder to Alkamenes (cp. Alkamenesstudien, p. 6, figs. 4-5, pl. II). I believe the dates assigned by Blümel to the two female heads from Cyprus, must be interchanged. K 261 on pl. 80 reminds one of Praxitelean heads, such as that of the Sauroktonos (cf. Rizzo, Prassitele, pls. 63-4), or Lysippan heads, such as that of the fluteplaying satyr (Klein, Praxiteles, pp. 212 ff., fig. 33), and thus it is to be dated after the middle of the fourth century. For the head K 260, pl. 79, on the other hand, the closest parallels are heads first made by the sons of Praxiteles (Bieber, JdI. 38-9, 1923-4, pp. 244 ff., figs. 4-12, pl. VI) and other early Alexandrian heads like the ones from Cyprus: Westholm, Temples of Soli, p. 188 f., pls. II, 1-2 and XXX, 5-6. This agrees with the comparison made by Blümel with the Florentine Niobids, but these also are to be dated not in the middle of the fourth century, but around 300 B.C.

Only one typographical error: list of abbreviations, p. 41, read *Ephemeris* instead of *Aphemeris*.

With the third volume completed this is one of the best catalogues of sculpture in existence.

MARGARETE BIEBER

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Studien Ueber den Bergbau der Roemischen Kaiserzeit, by *Ulf Tückholm*. Inaugural-Dissertation. Pp. 187, figs. 13. Uppsala, Appelbergs Boktryckeriaktiebolag, 1937.

This study is divided into three parts. The first deals with Roman mines from the technical point of view. The author sheds new light on the subject by approaching it from a new angle. Gifted himself with technical knowledge, he thus can combine the evidence from ancient sources on metallurgy with that derived from extant archaeological material. After introductory remarks on ancient and modern writers on the subject, he deals with the separate metals: gold, silver and lead, copper, tin and iron, describing at the same time the technical processes involved, the tools (furnaces, crucibles), and other items such as the fuel supply or the use of wind or water as power. It is not possible here to go into further detail, but one of his conclusions might be mentioned: that mining increased in quantity in Roman times, but that very few improvements in technique were made. One of the reasons for this is that the Romans left the technical operation of the mines to the natives after the incorporation of the provinces into the Roman Empire. It is interesting to note that mining was held in low esteem, not only because manual work was despised, but also because mining was considered detrimental to agriculture.

One minor point might be discussed. The author thinks that ironworking on a big scale might possibly have begun as early in Central Europe as in Anatolia, the region for which most scholars now assume priority. Against this opinion is the fact that the beginning of the Halstatt period—the Iron Age in Central Europe—cannot be dated earlier than 900 B.C., or later than the cor-

responding period in the East (cf. R. Pittioni, Urgeschichte, p. 88; Burkitt and Childe, Chronol. Table of Prehistory). The dating of the early Iron Age furnaces at Gerar (1175 (sic), 1100, 870 B.C.) is not certain, as it is deduced from the accumulation of débris, which, however, is never uniform enough to warrant so rigid a dating. Petrie says (pp. 7, 14) more cautiously: between the XXth and XXIInd dynasties: that is, between 1090 (sic) and 945, according to the generally accepted chronology.

The second part deals with problems of administration. The author divides the subject according to periods: the republic and the early and late empires, with attention to the relation of these periods with pre-Roman times. He deals separately with the mining of ores and with quarrying, as they were administered in a different way from the foundries. He also discusses the status of officials, employers, tenants, and workers, touching also on such problems as the colonate and the corporations.

A short third part describes from personal experience the lead mines at Ralja in Jugoslavia. An interesting fact is that while nearly all the ore had been extracted from the mines, its reduction had been so far from exhaustive that a modern company has now found it profitable to reduce it a second time.

VALENTIN MÜLLER

BRYN MAWR COLLEGE

DER MÜNZFUND VON VIMINACIUM, VORLÄUFIGER BERICHT, by Erik Gren. Pp. 64. Uppsala, Almquist & Wiksells; Leipzig, Harrassowitz, 1934. Kr. 2.50.

Dr. Gren gives here a very welcome account of the brief study he was able to make of some twenty thousand coins from the great hoard of well over one hundred thousand pieces, unearthed in two portions as long ago as 1902 in the ruins of the ancient Viminacium and now preserved in the National Museum, Belgrade. Dr. Alföldi in his studies had previously made use of 187 pieces which the Austrians had selected during the Great War and removed to Zagreb. Otherwise this very important and interesting material had not been made available to students until Dr. Gren undertook the difficult task.

Considering the generally poor condition of the majority of the specimens, Dr. Gren presents a brief but adequate catalogue of the 19,146 entire and the 1180 halved or quartered coins which he

was able to have cleaned and to study during his all too short stay in Belgrade. With the exception of one silver piece, five Greek bronze coins and a few representatives of the local issues of Viminacium from Gordian III to Aemilian, the hoard is revealed to have been composed almost exclusively of Roman imperial bronze coins of the third, fourth and fifth centuries A.D. Preponderant were the issues of Constantius II, Valentinian II, Theodosius I, Arcadius, Honorius and Theodosius II. The mints best represented were Thessalonica, Heraclea, Constantinople, Nicomedia and Cyzicus; while the minor mint Aquileia was numerically far better represented (81 pieces) than the great central mint of Rome (55 pieces). Perhaps the most interesting item was the presence in the hoard of so many halved or quartered pieces (some 6% of the total coins deciphered), together with many lead coins, "minimi," local copies and even blanks-all tending to show the deplorable state into which the copper currency had fallen during the disastrous years of the fifth century. Dr. Gren gives reasons for believing that the coins do not represent a hoard purposely thesaurized by some individual, but rather the contents of some chest or "till"-military or municipal (customs receipts?) - hastily buried at the time when Attila captured and destroyed the city of Viminacium in 441/2 A.D. The author argues convincingly that this and similar hoards of the period indicate a deflation (not an inflation, as some scholars have believed) of the copper currency. Foreign wars, internal disturbances, increasing weakness and even disintegration of the central government, barbarian raids and invasions-all greatly tended to remove money from circulation, diminish the coinage of new money, and bring about an ever increasing poverty among the people. There resulted a growing demand for copper coins, which the government could not or would not supply in sufficient quantities (the great falling off in official bronze issues during the first half of the fifth century is well known), a consequent increase in the purchasing power of bronze, and a need for yet smaller denominations. Hence this and contemporaneous hoards present the phenomena of old and worn coins brought back into circulation, the halving and quartering of many of these, the use for money of lead, local imitations, "minimi", and even odd pieces of copper and blanks.

In congratulating Dr. Gren on his valuable and interesting contribution, we can only join him in urging that a comprehensive and thorough study of the entire hoard be undertaken by some practised numismatist at the earliest possible moment.

Edward T. Newell

American Numismatic Society New York

Sylloge Nummorum Graecorum, Vol. III, The Lockett Collection, Part I, Spain-Italy (Gold and Silver), by E. S. G. Robinson. Pls. XII. Oxford University Press. New York, 1938. \$6.60.

This constitutes the first portion of a volume to be devoted to describing the collection of the well known amateur, Cyril Lockett, Esq. of London. Mr. Lockett collection of Greek coins, to judge by Part I, com, lises a remarkably well rounded selection of carefully chosen specimens. Well represented, too, are the smaller fractions, so often neglected by collectors in favor of the more popular larger denominations such as the tetradrachms and didrachms (staters). The average preservation of the individual specimens is high, and a few great rarities (for instance, the rare variety of the Tarentine nommoi, No. 148, the three gold coins of Metapontum, Nos. 405-6, the joint issue of Croton and Sybaris, No. 637, the stater of uncertain origin, No. 662, the very rare diobol of Rhegium, No. 661, etc.) serve to enhance an already impressive assembly of choice coins.

In comparison with earlier issues of the Sylloge, the present one, without being in any way prolix, adds a few more details to the running commentary to the plates—an improvement which will be very welcome to all users of this valuable publication. The plates and letter press are well up to the very high standard set by previous volumes; and numismatists and archaeologists in general are thus once more in debt to the able and scholarly work of the editor, Mr. E. S. G. Robinson of the British Museum.

EDWARD T. NEWELL

American Numismatic Society New York

Forma Orbis Romani: carte archéologique de la Gaule romaine dressée sous la direction de M. Adrien Blanchet. Fasc. VII; carte et texte complet du département de Vaucluse, par M. le Chanoine Joseph Sautel. Text, pp. xxxi+140, pls. I-IV, figs. in text 6 and plan. Atlas, with map and 2 plans. Paris, E. Leroux, 1939. This is the seventh installment of the work on Roman Gaul, begun in 1931 by the Académie des

Inscriptions et Belles-Lettres of the Institut de France. The delay in its publication-fasc. VI appeared in 1937-is due to the fact that the accompanying map is ahead of the descriptive text, the editor finding it necessary to mark all Roman sites on portions of six other départements, the text of only one of which has already appeared. This Gard forms the center of the map around which are grouped portions of Lozère n.w., Hérault s.w., Ardèche n., Drôme n.e., Bouches-du-Rhône s.e., and between the latter the western half of Vaucluse, the eastern portion having already appeared on fasc. VI (Basses-Alpes). Such a maladjustment of map and text from the first installment seems at first sight clumsy, but unavoidable.

Vaucluse, vallis clausa-the town of the same name (No. 55) was recorded to be situated in valle clausa as late as 979-lies in the eastern part of the Rhone valley near the foothills of the Alps. It was a part of Narbonese Gaul, set up by Rome in 121 B.C. Despite its relatively small area this département with its 19 cantons and 113 Roman sites described in the text is important archaeologically and historically, though most of its Roman story is to be read from the recovered monuments. Apart from Apt (18), Colonia Julia Apta (Pliny, NH. iii, 36), a town of the Vulgientes, and Carpentras (70), Colonia Julia Meminorum Carbonterate (Pliny, l.c.) our chief interest is centered on three better known sites of Vaucluse, all named by Mela (ii, 5) as among the opulentissimae cities of Narbonese Gaul. These are Avignon (64, plan pp. 32-33) on the east bank of the Rhone, the present capital of the département and in the Middle Ages celebrated as the sometime residence of the popes (A.D. 1309-1376), on the site of Avennio (Pliny, l.c.), an important town of the Gallic Cavares and under the Romans the chief town of the district; Orange (98, plan in Atlas), north of Avignon and east from the Rhone, the ancient Colonia Firma Julia Secundanorum Arausio (Pliny, l.c.), where the Romans were defeated by the Cimbri in 105 B.C., and Vaison-La-Romaine (88, plan in Atlas), northeast of Orange, the site of the ancient Vasio, chief town of the Vocontii (Pliny iii, 5).

Of these three, Vaison, now small and decayed, has furnished the greatest number of antiquities, the description of which occupies nearly a third of the text (pp. 50–99). Notable among these are the single-arched bridge over the Ouvèze, still in use (pl. I, 2); the theater (pl. II, 2 and IV, 2); the

well-known replica of the Diadumenos of Polykleitos found here in 1865 and acquired by the British Museum in 1869; the marble torso of a Roman emperor enveloped in a cuirass found in the ruins of the theater in 1912 (pl. VI); and the silver bust of an unknown Roman, dating from the close of the second century, found in 1924 (fig. 4, p. 94) - the last two in the local Musée municipal, of which the editor is conservateur. Orange, to whose antiquities nearly one-fifth of the text is devoted (pp. 104-128), has long been known for its two outstanding monuments: the triumphal arch with three gateways and double attic (n. façade on pl. III, 2), dating perhaps from before Caesar's conquest, the third in size and importance among those still standing in Europe; and the theater (pl. II, 1), its cavea in ruins, but the best surviving example of a Roman stage structure with its two doors, and still used on occasion. Of the three main sites Avignon shows the least important Roman remains (pp. 30-38), such as fragments of a triumphal arch (fig. 2, p. 31), vestiges of a large edifice with portico and column bases, extensive arcades, etc.

Remarkably few remains of Roman roads and milestones have survived in Vaucluse. Here as elsewhere in S. E. France the roads are hard to trace, as they are mostly covered by modern ones and some existing sections are Gallic and not Roman. Only three important roads traverse the area. The Via Agrippa, after crossing the Durance, which forms the southern boundary of the département, runs northward via Avignon, Orange, and Bollène (108), the latter on the site of the Mutatio ad Leloce mentioned in the Jerusalem Itinerary, and thence further north through the département of Drôme. A milestone of Constantine as Caesar (A.D. 306-7), found in a monastery at Orange, belongs to it (CIL, xii, 5556). The Via Domitiana followed the course of an older Gallic Alpine route, which connected Arelate (Arles) on the Rhone with Mediolanum (Milan) via Julia Apta, Brigantium (Briançon) and the Alpis Cottia (Mt. Genèvre). To it belong a miliarium found near Apt in 1874, whose inscription shows that the road was restored in 3 B.C. by Augustus (CIL. xii, 5497), another of Hadrian's time found near Goult (35; CIL. xii, 5498), and the Pont Julien with its three arches still in use at Bonnieux (27: pl. I, 1). Lastly a section of a road (shown on Map VI) from Aix-en-Provence (Aquae Sextiae) in the département of Bouches-du-Rhône ran northward across eastern

Vaucluse and further via Sisteron in Basses-Alpes and Gap in Hautes-Alpes. Another stone found near Vaison (p. 64) may be a milestone, but is doubtful (CIL, xii, 5507).

There are full bibliographies of all works and local articles used in the text (IX-XXXI), and in lieu of an index of the numbered sites only the usual Table des matières (139-140). Although the plates are exceptionally clear, the names on the map are not always easily legible. The seventh installment, like all its predecessors, is a monument of the most exact and detailed scholarship.

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Das Römerlager in Oberaden und das Uferkastell in Beckinghausen an der Lippe, herausgegeben von Christoph Albrecht; Heft 1, Bodenfunde, Münzen, Sigillaten und Inschriften, nach Ergebnissen der Grabungen von A. Baum, bearbeitet von Christoph Albrecht, Kurt Regling und August Oxé. Pp. 82, pls. 59, and 3 folding plans. Dortmund, Rehfus, 1938. RM. 30.

This fascicule of the publication of Oberaden will be followed by two more, discussing (1) the ceramics, iron, bronze, wood, and other finds, and the early excavations on the site, and (2) the supplementary excavations of 1937–38 and the general historical evaluation of the site. The present fascicule somewhat regrettably omits anything more than dark hints on this last very important matter, but numismatically it is clear that Oberaden was abandoned in or before 8 s.c., after a short occupation.

This trans-Rhenish camp consisted of three units, a small watch-tower and an "Uferkastell" on the Lippe, and a large camp some two km. away, capable of accommodating two legions and a substantial number of auxiliaries. The editor, who had no share in the original excavations, has labored under great difficulties in presenting material gathered by an earlier investigator, and is to be congratulated on his handling of the problem. The comparatively brief text is supplemented by lavish plates and plans. To cavil at such generosity would be perverse, and doubtless detailed use of them will appear in the future fascicules, but one cannot help reflecting that these illustrations make a significant contribution to the cost of the publication, while the main significance of Oberaden lies much less in the plans and elevations than in the finds.

The coins, for which the manuscript was prepared by Regling years ago, include 9 denarii ranging from 90 B.C. to Augustus, 3 Roman bronzes of Sex. Pompey and Augustus, 152 local issues of Augustus, 1 autonomous Celtic bronze, and 65 unattributable bronzes. Among the local issues, 143, or 85% of those attributable are from Nemausus, compared with progressively decreasing proportions on later German sites (2% at Hofheim). A number of coins are divided in half, to make small change.

Oxé also prepared his manuscript some time ago. He discusses a name branded into a barrel, 2 centurions' names cut into oak joists, 70 inscriptions of centurions on wooden pila, and 3 amphora stamps. But his greatest contribution lies in his treatment of the sigillata. The present decade has seen a number of important studies in this field—several of them from Oxé's pen—among which Oberaden takes a leading place. It would be easy and pleasant to lapse into a panegyric of Dr. Oxé and his work over the last forty years; suffice it to say that in this case, as in its predecessors, nearly every sentence carries some new and definitive statement.

First discussing vase-forms, he distinguishes three decorated shapes. Several examples of the beaker-form usually associated with Aco appear in true sigillata, signed by Pantagathus C. Anni, and several non-sigillata examples of the same shape are signed by, or attributable to Aco himself. These last lie somewhat aside from the purpose of Oxé's study and are therefore unfortunately treated less exhaustively than might have been the case, but a special and very valuable section is consecrated to Pantagathus, whose importance to future investigations is thereby much enhanced. Since most ideas of decorated Arretine work stem chiefly from the specimens from Perennius' shop in our museums, this detailed treatment of a non-Perennian artist is especially welcome and broadening. Perennius himself is unrepresented at Oberaden, and the familiar crater-form exists only in local imitations. The plain forms are divided into twelve groups, mostly in fractional relations to the Roman foot, and the interesting point is convincingly established that the very common conical cup (Haltern 8), which is sparingly represented at Oberaden, developed in other unknown Italian sigillata centers before its adoption at Arezzo. The typical Arretine form (Haltern 7) was somewhat different in contour.

Second, each signature on decorated and plain ware receives detailed treatment, which usually involves invaluable obiter dicta bearing upon the place of origin, connection with other names, character of the shop, distribution, classification and meaning of various name-formulae, etc. For instance, it is now shown that some forms of Italian names are peculiar to transalpine sites, implying transalpine branch factories at an early date. Again, the signature L.S.G., by all means the most frequent stamp at Oberaden, is identified as belonging to the well-known L. Saufeius, whose cognomen was Gausa. Whether all stamps L.S.G. and L.S.C. (e.g. at Ephesus) are to be referred to him (so Oxé) seems to me still open to question. Again, the last character on the stamp Diomede Vibii 3, is interpreted as c(ontrascriba), which may or may not be correct, but is at least a brilliant conjecture with much to recommend it. Again, Oxé has now tacitly changed his former interpretation (Bonn. Jb. cii, 1898, p. 141) of Chrestu Publi and the like, from "public slave" to "slave of Publius"-a difference with manifestly far-reaching implications. Sometimes the reader may differ: the suggested derivation of the slave-names Samo and Samia from association with "die berühmten vasa Samia," bolstered by Cornelius' Rodo and the fame of Rhodian pottery, is a little too suggestive of a recent German attempt, to capture this Samian will-o'-the-wisp. In view of modern confused nomenclature and of Waagé's observations in Antiquity xi, it would be better to suspend judgment on the interrelationship of Italian sigillata and vasa Samia, however famous the latter were. Or the categorical denial of such a stamp as TxThyrs should be made conditional upon a rereading of Samaria i, p. 304, IXTHYB.

Altogether, 46 signatures of 31 slave and free potters are represented at Oberaden. The list includes many familiar names and is indispensable chronologically and otherwise to anyone dealing with pre-Christian sigillata. In the third section a brief but adequate comparison is made with lists from Xanten, Neuss, Köln, Mainz, Basel, Haltern and Vindonissa (in descending order of comparability). Most interesting is the context of the famous "Kranichkelch" at Mainz by Ateius, upon which Oxé introduces an interesting digression; the accompanying pieces are practically interchangeable with Oberaden and suggest that an early Italian-made product of Ateius may yet lie under the surface at the site.

But nothing bearing this familiar signature has yet appeared, thus contrasting strongly with Haltern. Oxé also suspects that Sex. Annius may yet be represented, and the same would be true of several other early names.

The fourth section is an excursus on the decorated work of Pantagathus.

It is not often that an excavation report, especially one dealing with a Roman camp, attains a generalized importance; but *Oberaden*, through circumstances which are partly fortuitous and are partly due to the good judgment of the excavators in securing the unique aid of Oxé in treating the sigillata, is a publication which should be accessible to every student whose inquiries lead him to the study and use of Italian sigillata as evidence.

HOWARD COMFORT

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FRÜHGESCHICHTLICHE FUNDE AUS WESTFALEN IM STÄDTISCHEN KUNST- UND GEWERBEMUSEUM DORTMUND, by Christoph Albrecht (Veröffentlichungen aus dem Städtischen Kunst- und Gewerbemuseum Dortmund, Band I). Pp. 63, pls. XIV, figs. in text 39. Dortmund, Rehfus, 1936. RM. 10.

Prior to the birth of "the vigorously promoted National Socialist purpose to reanimate all cultural enterprise" (p. 5) the important collection of Germanic and Roman antiquities had slumbered in virtual obscurity except for the publication of a hoard of Celtic coins by Forrer and of two Roman hoards by Regling. Now, however, the Museum has happily adopted a long-range program of publication, and in this first fascicule brings into a single volume with up-to-date treatment the miscellaneous material of its period gathered by a former Director from various sporadic finds and more or less systematic exploration in the district. Most of these are sepulchral, in some cases from extensive cemeteries. Under the circumstances, coins receive comparatively little attention, but three gold neck-rings found with one hoard are now for the first time given adequate illustration.

Pages 11 to 51 are a catalogue of items and groups alphabetically arranged by sites, profusely and beautifully illustrated with figures and plates. The collection of bronze buckets and dishes from Veltheim on the Weser naturally receives extensive treatment; on the basis of accompanying sigillata and other context the

group is attributed to the third century instead of to the fourth, against Ekholm. The pottery, which is predominantly Germanic, also claims detailed discussion and illustration. The remainder of the text is an estimate of the evidence in its bearing upon the cultural history of Westphalia in the period under consideration, although the lack of detailed original excavational records sometimes hampers Dr. Albrecht. Very close commercial relationship with Roman Germany is clear from the many coins found, while a fragmentary clay boat from a grave at Natrop-Klostern indicates affinities with the ancient Germanic cult of the dead. The picture shows a "free Germany" with strong influence from the Roman province, about as one would expect. The marked general absence of funerary furnishings is attributed by Albrecht to the customs of the inhabitants rather than to their povertyalthough the flourishing settlement at Veltheim could certainly be generous to its deceased.

This fascicule, like its successor Oberaden I, is a fine exhibition of bookmaking and scholarship, and promises well for the projected remainder of the series. One wishes that other local museums, both in Germany and elsewhere, would acknowledge the duty of making their exhibits known to a wider public with the same thoroughness and care as that shown by the Dortmund Museum.

HOWARD COMFORT

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CORPUS BASILICARUM CHRISTIANARUM ROMAE: The Early Christian basilicas of Rome, IV-IX century: vol. I, no. II, by Richard Krautheimer. Monumenti di Antichità Cristiana, pubblicati dal Pontifico Instituto di Archeologia Cristiana. Pp. 65-136, pls. xi-xvii, figs. in text 48-84. Città del Vaticano, Rome, 1937.

The appearance of the second part of the monumental work on the Early Christian architecture of Rome adds to our knowledge the comprehensive survey of the churches of S. Angelo in Pescheria, S. Apollinare, SS. Apostoli, S. Balbina, S. Bibiana, S. Cecilia in Trastevere, S. Cesario in Palatio, S. Cesario in via Appia, S. Ciriaco in Thermis and the lower church of S. Clemente.

As in the first part of this publication, for each of the monuments surveyed, the author gives all the available documents, both literary and illustrative; the known chronological changes of the building; a detailed description of the present state of the structure; a critical analysis and

mental restoration of the monument, in order to ascertain its original character, and its historical position established on the basis of the foregoing survey.

Although only a portion of the churches have been thus far surveyed, the lucid exposition of the nature and the historical position of the monuments permits us to generalize about the different stages of development represented in the Early Christian Architecture of Rome. First of all the Early Christians-for all the erroneous assumptions to the contrary-had no scruples about converting pagan structures into Christian churches. The case of S. Andrea in Catabarbara, which was built probably by Junius Bassus as a secular basilica before 359, but dedicated as a Christian church by the Goth Valila during the pontificate of Pope Simplicius (468-83), is one illustration: that of S. Adriano, which was built by Diocletian as Curia Senatus and converted into Christian use by Honorius I (625-38), with practically no structural changes, is another. To these may be added the church of S. Balbina, one of the earliest Roman basilicas, which was converted into a church probably long before 595, although this date is the only recorded evidence for the existence of a Christian building on that site.

Second, the originality of Rome, which has been ignored or frequently minimized, was truly phenomenal in the diversity of plans, scale, and superstructure of its churches. This diversity may be ascribed partly to the creative spontaneity of Early Christianity recently come into power, partly to the original character of communal meeting houses and martyr-tombs which were rebuilt as churches, and partly to the more ostentatious civic expression of the new Christian Roman state. Thus large five-aisle basilicas, such as S. Peter, S. Paul outside-the-walls, and S. John in the Lateran are coeval, with the lesser box-like examples without apses, the "Hallchurch" type, which had an apse and occasionally transverse arches, and the regular basilicas with apse and aisles, like the lower church of S. Clemente.

Third, this originality is practically arrested or largely submerged by a wave of Eastern influence which, beginning with 450, comes on the heels of a westward migration of Near Easterners—Greeks, Syrians, Armenians, Copts, etc., and prevails until the beginning of the ninth century. Italian centers like Rome and Ravenna became hosts to

more than a dozen popes and bishops, hundreds of clergy and monks, and thousands of tradesmen from the Near East. Architecturally this invasion is reflected in a number of important buildings, only a few of which have been so far surveyed. S. Agata dei Goti of the late fifth centurywhich served the Arian sect and which was undoubtedly in close relation with the Eastern centers where Arianism flourished-is more easily reducible to Byzantine feet than to similar Roman units of measurement. The measurements of S. Agnese fuori le mura are also Byzantine and together with the type of galleries, the proportion of the aisles, and the use of the impost block show the extent and nature of such influence. The unique character of the type represented in S. Anastasia can be explained only by ultimate reference to Asia Minor, where it is common, and its migration westward can be corroborated by the existence of several scattered examples in Northwestern Europe. Similarly the SS. Apostoli, with its triapsidal plan-whose prototypes are found in Bethlehem, Der Schag, der Abiad, and Dendera - comes from a period in the sixth century when Rome was subjected even to military Byzantine occupation. Tradition emphasizes this subjection symbolically by recalling that Narses gave the column of Trajan to this church, which probably belonged to a Greek community.

The last stage in the development of this Roman architecture coincides with the Carolingian Renaissance and substantiates the earlier observations of Dvorak (Gesammelte Werke) that Rome had an independent revival. Krautheimer's present investigations show that the church of S. Cecilia in its original ninth-century state represented the typical Roman basilica of the fourth and fifth centuries, which once more came into prominence with the subsidence of Eastern influence. This is also the case with such churches as S. Prassede, S. Stefano degli Abissini, S. Martino ai Monti and others to be surveyed later.

It is a pity, however, that our praise and gratitude for this work must be qualified by numerous disturbing errors in editing, typography, and English usage. Germanistic construction does not clarify the meaning of unusually long and involved sentences, such as the following: "Nevertheless it stands on ground that is extremely rich in Roman remains: under the northern wing of the monastery remains of the Servian wall have been found, while within the walls of both its eastern and western wings (and according to Lanciani's plan the wall also under the courtyard to the right and even under the church itself) there are remains of a large building constructed in opus reticulatum with broad stripes of bricks." The names of a number of the churches appear in one form and order in the table of contents and in different form and order in the text. Such unorthodox compound words as "rearwall," "eachother" (p. 72), "mortarbeds," "mainlines" (p. 80), "tufablocks" (p. 100), and "centeraxis" (p. 100) are used more than once and virtually side by side with the canonical forms. "Early Christian," "Early-Christian," and "early Christian" (pp. 79, 93) are paralleled by 'opus mixtum,' opus mixtum, and "opus mixtum" (pp. 127, 133), but equally inexplicable. Furthermore such obvious misspellings as "CRONOLOGY" in a heading (p. 73) and "ewerywhere" (p. 133) are not difficult to catch. The Corpus is unavoidably being produced in Italy and thus suffers like most books and journals published in English there, but with more care on the part of the author and his proofreaders most of the errors indicated could be avoided.

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Ancient Andean Life, by Edgar L. Hewett. Pp. xiii+321, pls. 28, map, index. Indianapolis and New York, Bobbs-Merrill Company, 1939. \$4.00.

The present volume is the last of a trilogy on ancient American life, the earlier volumes being Ancient Life in the American Southwest and Ancient Life in Mexico and Central America. In it Dr. Hewett not only discusses the high points of Andean archaeology and its relationship to the whole field of American archaeology, but sums up his views on the American Indian, western civilization, the philosophy of archaeology, the work of archaeologists he has known or who have influenced him, and the shortcomings of anthropologists and historians. It is entertaining, spirited, at times sentimental and dogmatic, but throughout imbued with kindly common sense and humor.

The book falls into three parts: "Human History, a World-Drama," "The Andean World," and "Retrospect and Conclusion." In the three chapters that comprise the first part, the author discusses the development of native American

culture against a world-wide background of culture history, placing considerable emphasis upon a Spenglerian distinction between "culture," the product of the racial mind nurtured by geographic environment, and the mechanization of our city-born "civilization." In the second part, we have one chapter devoted to a spirited description of the Andean highlands and neighboring areas, and another very interesting chapter on Andean Life today. The third chapter on the Epoch of the Incas gives us only twenty pages on the political history of the Incas, and fifty-three on the lives of Pizarro, his companions and successors. Dr. Hewett is so distrustful of the Spanish Chroniclers, because they interpreted Inca life in terms of their own European life, that he makes very little use of the data they have left us about the Inca state, and this is therefore the weakest part of the book. The last two chapters of this section deal with Pre-Inca times, its important sites and collections, and with the archaic background of Andean origins. The third part begins with a chapter summarizing the work of the most important archaeologists of the nineteenth century. The second chapter, "Forty Years in the Trenches," gives us a picture of recent archaeological achievements, while deploring the sterile "mechanization" resulting from the technical developments in archaeology. The last two chapters define what the Science of Man should be (if it were not for the "incompetence of anthropologists") and the place of archaeology in the preservation of supreme human values.

This book is not to be read as an introduction to Andean archaeology, nor as a handbook for the student, but it should prove stimulating and provocative for those who already have some grounding in the subject.

FREDERICA DE LAGUNA

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Dating Prehistoric Ruins by Tree-Rings, by W. S. Stallings, Jr. General Series Bulletin No. Eight. Pp. 20, pls. 5, selected bibliography, Laboratory of Anthropology. Santa Fe, New Mexico, 1939. 50 cents.

Dating prehistoric ruins in our Southwest by the use of tree-rings and their patterns is a familiar subject to most archaeologists. To those, however, who have a less professional interest in North American Prehistory, or to those increasing numbers of wanderers whose summer excursions criss-cross the Southwest, the method of using tree-ring patterns to date ruins is somewhat of a puzzle.

No clearer or more concise account of these methods has been published than the above bulletin by W. S. Stallings, Jr. In brief, simple fashion, and with the aid of several plates, one is introduced to the methods used. Lest one receive the impression from the diagram shown in Plate III that tree-ring dating is quite as simple an operation as thus demonstrated, Mr. Stallings explains the pitfalls of false and missing rings, and shows the careful manner in which rings are matched and by overlapping are progressively extended into the past in order to build up a master plot for dating purposes.

A brief sketch of the history of the method by which Dr. A. E. Douglas so patiently developed the study of tree-rings, shows how a chronology has been established in the Southwest as far back as 11 a.d. To the professional archaeologist, as well as to the amateur and the casual wanderer in the Southwest, this bulletin can be highly recommended to stimulate interest in tree-ring studies and make a visit to the ruins in the Pueblo region more instructive and enjoyable.

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MAPUNGUBWE: ANCIENT BANTU CIVILIZATION ON THE LIMPOPO. Report on excavations at Mapungubwe (Northern Transvaal) from February, 1933 to June, 1935. Edited on behalf of the Archaeological Commission of the University of Pretoria by Leo Fouché. Pp. xiv+183, 8 maps and diagrams, 4 color pls., 40 monochrome illustrations. Cambridge University Press; New York, The Macmillan Co., 1937. \$15.00. During the months of December and January, 1932-33, treasure hunters uncovered on a sandstone kopje near the southern bank of the Limpopo River in the Northern Transvaal a quantity of gold objects associated with the remains of a human skeleton. This was reported to Professor Leo Fouché of the University of the Witwatersrand at Johannesburg, and some of the gold was sent to him. It was found to have "great resemblances" to gold objects from the famous site at Zimbabwe, and the importance of the find was soon recognized at the University of Pretoria. A reconnaissance was made and as a result the site, known to the natives as Mapungubwe, was

purchased and conveyed to the Union Government as a protected area, with rights of excavation reserved to the University. Funds were raised by the University with the assistance of the Government, further reconnaissances, including an air survey, were made and excavations undertaken during the period from February, 1933, to June, 1935, which form the subject of the present volume. The air photographs revealed terrace walling and the foundations of huts and grain bins, where surface explorations had failed to find them, and thus provided a valuable guide for excavation.

No gold objects similar to the original finds, which had been recovered from the treasure seekers, had previously been uncovered outside Southern Rhodesia. There many irresponsible gold diggers had been at work, while little damage had been done at Mapungubwe, so that comparison of probable yields from the latter with those from the Rhodesian sites examined by R. N. Hall and W. C. Neal (The Ancient Ruins of Rhodesia) could be expected to throw new light on the ancient civilization of the region. Mapungubwe is "in the track of the successive migrations from the north and west," and the material it could be expected to yield might provide data for determining the course of these, the relations between them and the ancient mines and ruins of the whole area from the borders of the Belgian Congo to the Vaal River basin. "And, most fascinating of all, Mapungubwe might help to solve the riddle of Zimbabwe."

Important materials contributing towards these ends have been painstakingly obtained and they have been carefully studied in this first Mapungubwe volume; but its total effect can only be said to leave the riddle of Zimbabwe a still greater puzzle, for the present. But the work is continuing, and apparent contradictions may still be resolved.

Only the gold and the pottery are considered to indicate clearly an association with Zimbabwe and that this connection is to be assigned to the second or later period of occupation there—Zb₁ of Miss G. Caton-Thompson (Zimbabwe Culture) as well as the earlier period Za. These types of pottery at Mapungubwe are labelled respectively M₁ and M₂ and assigned to Bantu (South African Negro) cultures named Shona (M₁) and Sotho (M₂). At Mapungubwe their association is contemporaneous and from this it is concluded that the "two cultural streams, one from the north and

east (Shona) and one from the west (Sotho), met at Mapungubwe, where they coalesced. . . . The gold objects are a strong link with Rhodesia [Zimbabwe] . . . from which they certainly came," and thus "there can be no doubt that the Shona people came across the Limpopo subsequently to their having established themselves at Zimbabwe." The gold is assumed to represent "ritual objects . . . which would more likely have been brought if the tribe had migrated as a whole." This sums up the evidence for a southerly migration to Mapungubwe and for its having followed the abandonment of Zimbabwe by the M₁ people.

As for the migration from the west: "The pottery of the M₂ people, who were throughout contemporaneous (with M₁, Shona), is linked up with that which is found on sites to the west of Mapungubwe." It bears a "generalized resemblance to Zimbabwe A pottery" and its makers "were probably distant connections of the first Zimbabwe people and belonged to one of the divisions of the Sotho-Chuana stock." It should be said here that a number of other sites were explored, east and west of Mapungubwe.

The wares described are, with those from Zimbabwe, called Shona or Sotho, from their identity with or close resemblance to pottery now being made, or known to have been made more or less recently, by groups belonging to those stocks. From the "purely cultural" evidence, older peoples of Sotho and Shona stocks are made the earlier and later occupiers, respectively, of Zimbabwe, and the Shona people the dominant, the Sotho the subject, population of Mapungubwe.

The danger of this procedure is brought home to the Editor with an irony which may fairly be called dramatic, by which the findings of the anatomists to whom the work of studying the skeletal material was entrusted followed the "culturally" deduced conclusions of the other, apparently unsuspecting experts.

As we have seen, the Mapungubwe culture as the result, mainly, of the study of the pottery, was adjudged to be of Bantu, or, to be more anthropologically precise, of South African Negro origin. The skeletal remains comprised bones of eleven individuals, which were all that were in a state of preservation suitable for analysis out of the remains of twenty-four individuals found. These were studied in the Anatomy Department of Witwatersrand University by a team of science research students under the direction of Dr. A.

Galloway. Dr. Galloway concludes his report with the words: "Mapungubwe represents a homogeneous Boskop-Bush[man] population physically akin to the post-Boskop inhabitants of the costal caves." In other words, "these Mapungubwe people are of the same stock as the big-boned pre-Bantu-speaking people. . . . The first Negro migration would not have reached as far south as Mapungubwe by the time of its original settlement, for there is no evidence to point to these bones being those of even a modest mingling of Negro and pre-Negro. . . . The absence of Negro impurity in the 'Sceptre' skeleton, presumably that of a leader among his people, and whose blood would unlikely be defiled by the arrival of a sporadic alien, is particularly striking in this connection."

Beside this clear-cut assertion of an autochthonous origin for the inhabitants of Mapungubwe, place the equally uncompromising statement of J. F. Schofield: "From the association of gold beads, gold plating, and gold tacks with a fine pottery which shows a strong resemblance to the Class B and B₂ Zimbabwe pottery as described by Caton-Thompson, it is certain that these people linked with the Zimbabwe Culture at its most flourishing period of the Second Phase, and should therefore be classed with the Shona." Schofield assigns a late date to this phase of Zimbabwe, a. 1500 A.D. to the first quarter of the nineteenth century.

On the dilemma thus posed, the Editor comments that it would be unwarrantable "to assume that the Zimbabwe people were racially the same as the Mapungubwe people, because their culture is identical, and that therefore Zimbabwe was occupied by a Bush-Boskop race." But is not this the same argument that was used, in an inverse sense, to bring the shades of Bantu Negroes to Mapungubwe only to be confronted by solid physical evidence which annulled their claims? Professor Fouché notes, however, that Mapungubwe presents the problem of the relations between race and culture "in an acute form," and that the problem is not rendered simpler "by our ignorance in regard to the origins of 'Bantu' culture" and in regard to "the fundamental question: 'What non-Negro elements are present in this Negro culture?"" It might even be suggested that perhaps the excavations at Mapungubwe have begun to provide the elements of an answer.

A limited amount of ethnological data collected in the neighborhood of Mapungubwe by Professor G. P. Lestrade is considered to "support the views of Jones and Schofield in every way." Two native traditions are cited by Schofield, who, however, does not seem to be sure of their authenticity. One relates that Mapungubwe "was an outpost of the Monomatapa's Empire"-the famous halflegendary empire of early Portuguese records-"and takes its name from the regiment that held it." The other is to the effect that "the King of Zimbabwe visited Mapungubwe and died and was buried there." "Jones" is the Reverend Neville Jones, well-known for his work in South African prehistory, who writes a general account of the excavations of 1934, of which he was in charge. Schofield is responsible for the important section of the book dealing with the pottery, in which is expounded the Shona-Sotho theory.

The "Sceptre" skeleton referred to by Galloway is that of one of two burials in which were found M₁ ware and a quantity of gold. The "Sceptre" consists of gold plates, which appear to have sheathed a wooden staff. The burials excavated were all on the summit of the kopje, and this fact, together with their contents of gold and fine ware, leads to the conclusion that these people were Shona and that they formed the dominant group in the population of Mapungubwe.

Professor Fouché sums up his reflections on "Results obtained and problems raised" with a non liquet which we may well echo, together with his plea for an extension of systematic work to the related sites and old mines in Southern Rhodesia as well as in the Transvaal, with the coöperation of both Governments and the collaboration of all who are interested in the archaeology of South Africa.

Ambler, PA.

H. U. Hall

L'ART PRÉ-ROMAN, by Jean Hubert (Les Monuments datés de la France). Pp. vii+202, 191 illustrations in the text, 40 pls. Paris, Les Éditions d'art et d'histoire, 1938.

The problems of pre-Romanesque art in Europe are numerous and difficult, and progress in their solution is always important. In this volume, M. Hubert has made a sincere effort to give a clearer picture of the period, to clarify the situation by discussing only monuments which can be fairly accurately dated, and to establish the evidence for a flowering of church architecture and decoration in the seventh century. He does not attempt an inclusive or final analysis of Merovingian and Carolingian art, but merely presents a study of part of the available material, a study which he regards as a preliminary step toward a more

exhaustive examination yet to be undertaken. The emphasis is placed upon architecture and the arts most closely associated with it, while the minor arts of illumination and ivory-carving are omitted. As the book is mainly devoted to the mere presentation of the monuments selected, there is a dearth of conclusions, the drawing of which he leaves for the most part "à de plus audacieux." Thus the book is something of a disappointment to those who expect a new light on the thorny questions of origin, transmission, and development. A great deal of useful material, however, is presented, which would be otherwise hard to find, and in the end a new sense of the undoubted magnificence of many of the churches of the time comes to displace the usual conception of their smallness and poverty. In the light of this volume the Carolingian Renaissance does not seem so remarkable, since it was preceded by a period of considerable artistic excellence and splendor, the traces of which have all but disappeared.

It is difficult to estimate the actual value of the book, since it is limited in scope and, in general, inconclusive. Furthermore, the author's unwillingness to attach any real importance to monuments outside Gaul, and his rather brusque (and often unsupported) rejections of theories widely held in regard to origins and influences make portions of his remarks rather difficult to accept. For example, it is hard to maintain that French Merovingian and Carolingian architecture developed entirely independently after the fifth century, or that manuscripts had no influence on mural decoration.

The book opens with a list of monuments which the author regards as being of established date, and the reasons for the attribution are given with each. In most cases the evidence appears sound, though it seems inconclusive in the case of the Oratory of Glanfeuil, and at times a rather wide latitude is permitted for buildings which are presumably "exactly dated." The basis for selection, since the list is not inclusive, is also not made clear. The church of Saint-Martin at Angers, one of the most interesting pre-Romanesque sites in France, is not mentioned, though it has been published by Pinier in the Congrès archéologique de France for 1910 (Vol. I, pp. 191-207) and also by De Lasteyrie in L'Architecture religieuse en France à l'époque Romane (p. 147 ff.). M. Hubert relies on archaeological evidence for dating elsewhere, so it is hard to understand why this important building should have been omitted.

From the monuments the book turns to an examination of the arrangement of the episcopal and monastic churches and the general types of plan employed. While ready to admit the strong influence of the East in such details as the triple apse and the central plan-in fact, all the elements of plan and elevation except the bell-tower are of external origin-M. Hubert asserts (p. 171) that after the fifth century religious architecture in Gaul developed "en toute indépendence." This rigid exclusion of outside influence becomes, at times, rather difficult to maintain, as in the case of Aix-la-Chapelle. The theory that this building is derived from San Vitale at Ravenna is scornfully rejected on the grounds that there is no documentary evidence to support such a connection and that since Ravenna was not an important city in Charlemagne's day, he could scarcely have wished to imitate a building that was at that time "sans prestige." No one would seriously claim that Aix is a literal copy of San Vitale, but the similarities are so striking that on purely architectural grounds some connection is obvious. It is well known that materials for the building of the chapel at Aix were taken from Ravenna at the invitation of the Pope, so its builders must have known the Italian church. In support of his view, the author cites an article by M. Marcel Aubert in the Congrès archéologique de France for 1922 (incorrectly cited as 1919), which says that Aix is not a copy of San Vitale. In view, however, of the connection which is subsequently made between Charlemagne's chapel and the late fifth- or early sixth-century octagon of Hierapolis in central Asia Minor, it is interesting actually to quote M. Aubert's remarks (p. 526): "Celui-ci (Eudes de Metz) ne copia pas servilement un monument ancien, pas plus San Vital de Ravenne, que Saint Serge et Saint Bacchus de Constantinople, mais sur leur modèle et celui d'autres monuments d'Italie du Nord qui ont dû exister et qui sont aujourd'hui disparus, il créa une oeuvre originale." It would thus appear that San Vitale served for at least one of the models for the building and also that there was a certain amount of external influence operating on pre-Romanesque architecture after the fifth century. M. Hubert finds the octagon at Hierapolis a better prototype, but leaves unanswered the question of how the knowledge of its plan and elevation was transmitted or what use was made of it in the intervening three hundred years.

Considerable attention is devoted to the de-

velopment of the crypt, a feature which apparently was not an integral part of the church prior to the end of the eighth century, the earlier examples being independent tomb chambers. Passages in such chambers eventually led to the evolution of the ambulatory and the chevet with radiating chapels.

From the atrium came the western apse or porch, often two stories in height, which ultimately was enlarged to form such complex arrangements as those found in the ninth-century cathedrals at Cologne, Saint-Riquier, Auxerre and elsewhere. In the case of Auxerre, these additions to the western end of the church became so unwieldy and interfered so seriously with the function of the building that they were removed in the later tenth century, and this probably explains the general abandonment of western apses and transepts, though they lasted longer in monastic churches where they were more suited to the liturgical needs of the monks.

No new light is cast upon the origins of the Oratory of Theodulph at Germingy-des-Prés, though all European prototypes are rejected and an eastern origin is indicated, roughly along the lines of the church at Bagaran.

The one purely Gallic development is that of the bell-tower, a feature found there as early as the fifth century in the descriptions of the church of Saint-Martin at Tours. The exact appearance of this tower is not known, but the presence of a bell is specifically mentioned. The ultimate source of the towered façade is probably to be found in Syria, but it remained for the builders of the eighth and ninth centuries to develop it into the crowning feature of the church.

The discussion of the types of construction and the materials used contains an interesting section about the marble quarries of Aquitaine and the export of that stone throughout Gaul and even foreign countries. It was widely used for structural elements as well as ornamental details and sarcophagi until the latter part of the eighth century, when the invasion of Charles Martel following the Saracenic wars virtually put an end to the industry. Until the last part of the next century builders and sculptors either had to use inferior stone or pilfer classical marbles. This new necessity for the use of plain stone led to the common adoption of the pier as the supporting member in place of the column.

The latter part of the book is given over to a discussion of the decoration of the interior of the

churches and the evidence is sufficient to prove that many of them, even as early as the fifth century, must have presented a splendid effect. Mosaic was well known at an early date, as is shown by the elaborate decorative scheme of Notre-Dame de la Daurade at Toulouse. Fresco was also used, though most of this has since been lost. M. Hubert declines to admit that this mural decoration derived, to any marked extent, from manuscripts or any of the minor arts, in spite of the fact that this is a very generally accepted theory. He cites the article by Miss Woodruff on the mosaics of La Daurade (Art Bulletin xiii, No. 1, pp. 80-104), but does not mention her conclusion (p. 100) that the series probably derived from an illustrated bible. He cites the famous passage from Gregory of Tours' History of the Franks, about the wife of the bishop of Clermont, who read a bible aloud to her artists to tell them what to paint on the walls. It might seem reasonable to suppose, however, that the lady in question had an illustrated bible as a guide. The author maintains that the western manuscripts of the eighth century were still all but unillustrated, forgetting such well-known examples as the Codex Purpureus, the Ashburnham Pentateuch, the Cambridge Gospels and the Codex Grandior, all of which were done prior to the eighth century. E. S. King's attribution of the frescoes of the crypt of Saint-Germain d'Auxerre (Art Bulletin xi, 1929, p. 375) is summarily rejected. In the face of the close stylistic parallels between these pictures and manuscripts, known to have been done in the scriptorium of Saint-Denis, the author merely remarks that all the arts of a period are more or less alike and that similar details are to be found on ivories executed far from Saint-Denis, though no examples are given. This opposition to the theory of the transmission of style and iconography by means of portable works of art is difficult to explain, since most scholars seem to be agreed that in the troubled times of the early Middle Ages such objects were the chief models both for the illuminator and the mural artist as well (cf. for example, Joseph Garber, Wirkungen der frühchristlichen Gemäldezyklen. Der alten Peters- und Pauls-Basiliken in Rom, Berlin, 1918, p. 49, where he concludes that these pictures, as well as the mural decoration of a series of other churches, stem from a manuscript prototype). M. Hubert even professes to believe that the lost golden altarpiece of Saint-Denis is akin to mural decoration, in spite of the fact that it has been shown to be stylistically akin to the manuscripts and metalwork of the scriptorium (A. M. Friend, *Art Studies* i, 1923, pp. 73-74).

The effort to assign a position of supremacy to local artists is carried to extremes when the Paliotto of Milan is considered aesthetically inferior to the altarpiece of Saint-Rémi at Rheims, a work which has disappeared entirely and of which only a very sketchy description remains! Again, in the case of the stucco decoration of the tomb of the Abbess Aguilberte in the crypt of Jouarre (incorrectly described as being of stone) it is claimed (p. 157) that the artists of Jouarre had a mastery surpassing that of any contemporary work that has come down to us, a fact which may be true, but the native artists can receive little credit since R. Bernheimer has shown in a recent article in Ars Islamica (v, 1938, pp. 220-232) that the decoration is entirely Sasanian and must have been carried out in France by a Sasanian artist.

Such defects as these mar the importance of an otherwise interesting book, which shows clearly that not only did the Romanesque builders owe a great deal to their predecessors of the Merovingian and Carolingian periods, but also that there was artistic work of importance and splendor being created in France by the seventh century and even earlier.

J. C. SLOANE, JR.

BRYN MAWR COLLEGE

Antiken in deutschem Privatbesitz. Festschrift zum fünfundzwanzigjährigen Bestehen der Vereinigung der Freunde Antiker Kunst, herausgegeben von Karl Anton Neugebauer unter Mitwirkung zahlreicher Fachgenossen. Pp. 53, pls. 96. Berlin, Gebr. Mann, 1938. RM. 19.50.

This attractive and useful book brings before us 256 antiquities in private collections in Germany—many of them not hitherto published. The occasion of its publication is the twenty-fifth anniversary of the founding of The Friends of Ancient Art, a society created by the brilliant and enterprising director of the Berlin Museum, the late Dr. Theodor Wiegand.

The publication will be welcomed by all friends of ancient art everywhere. The objects range from Greek geometric to Roman times and comprise stone sculptures, bronzes, terracottas, pottery, silverware, glass, jewelry, coins, gems, and ivory statuettes. Few if any are major works which would be starred in a large Museum, but they make an attractive ensemble full of interest both to artists and archaeologists. Dr. Neugebauer and his colleagues are to be congratulated on their selection and presentation. The collotype illustrations are excellent and plentiful and the catalogue entries short and to the point.

With such a feast spread before us it is difficult to confine oneself to a few remarks. Artistically, perhaps the most important are the fragmentary marble head no. 5, a Roman copy of a Greek work of about 460-450 B.C., the early sixth-century handle no. 53, and the early Attic vase no. 142. The marble head of a boy in Berlin, no. 31 is, as the author points out, one of several replicas of this subject - listed by Gebauer, Einzelaufnahmen, text to nos. 3913-3915 (the one in basalt, formerly in the Charles Newton Robinson collection, is now in the Metropolitan Museum, cf. BMMA. vii, 1912, p. 94, fig. 1). With the little-master band-cup no. 154 and its dancing maenads and satyrs we may compare one in the Metropolitan Museum (Beazley, JHS. lii, 1932, pp. 188, 204, fig. 20). The pyxis, no. 169, seems to the reviewer not to be by the Villa Giulia Painter. Though the composition is similar to that of his pyxis in Copenhagen, the style is different. Specially interesting for their rare subjects are the Athenian lekythos, no.

167, with a huntress (Atalante or Kyrene?); the Boeotian lekanis, no. 161, with a scene from a cook shop (rather than a butcher shop?), and the Etruscan stamnos, no. 168, with athletes' implements.

For the two silver bowls with leaf ornament, nos. 208, 209, we can now refer to H. Luschey's excellent dissertation *Die Phiale*, 1939, pp. 125 ff. The type is there assigned to Ptolemaic Egypt under Persian influence.

The small votive bronze kithara, no. 84, is an important example in three dimensions of this much discussed musical instrument. It is noteworthy that the retaining band here lacks the strings which are regularly associated with it in representations on vases. This omission suggests that the strings are not part of the band but extra strings (as Beazley suggested, JHS. xlii, 1922, p. 74).

One minor complaint about this delightful book may be lodged. The 48 lenders, 16 authors, and 13 photographers are listed at the beginning, but the names are not repeated in the descriptions. Therefore, to identify the owner of a specific object or the author of a specific description one must go over the sometimes long lists—a time-consuming affair.

GISELA M. A. RICHTER

METROPOLITAN MUSEUM OF ART

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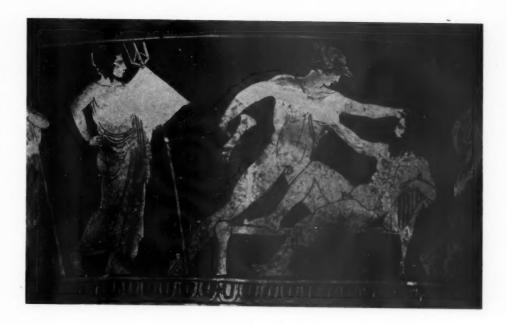




PLATE X.—CALYX-KRATER IN OXFORD, 1937.983







PLATE XI. - CALYX-KRATER IN OXFORD, 1937.983





PLATE XII.—CALYX-KRATER IN OXFORD, 1937.983





PLATE XIII. - CALYX-KRATER IN OXFORD, 1937.983



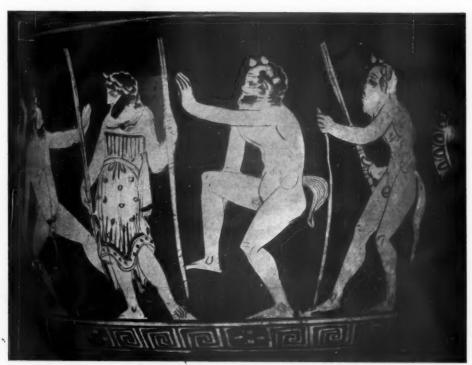


PLATE XIV. - BELL-KRATER IN GOTHA, 75

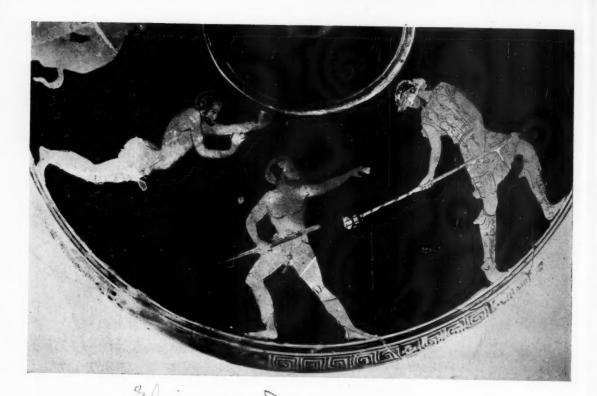




PLATE XV. - LEKANIS-LID IN BERLIN, 2578

